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U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
CHILDREN'S BUREAU
GRACE ABBOTT, Chief

CHILDREN OF PRESCHOOL AGE IN GARY, IND.

PART I. GENERAL CONDITIONS AFFECTING CHILD WELFARE

BY
ELIZABETH HUGHES

PART II. DIET OF THE CHILDREN

BY
LYDIA ROBERTS

Bureau Publication No. 122

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, July 13, 1922.

SIR: There is transmitted herewith a report on Children of Preschool Age in Gary, Ind., the last section of the investigation of the welfare of infants and children of preschool age made while Julia C. Lathrop was Chief of the Children's Bureau.

The investigation was directly in charge of Estelle B. Hunter; Elizabeth Hughes, who has written Part I of the report, was supervisor of the local field work; Dr. Lydia Roberts supervised the grading of the diet schedules and has written Part II on diet of the children. The statistical committee of the bureau, Profs. Walter F. Willcox, Irving Fisher, Thomas S. Adams, Robert E. Chaddock, J. W. Glover, and Edith Abbott, assisted in the planning of the inquiry. Dr. Robert M. Woodbury, director of the statistical division, has been responsible for the statistical work in connection with the report.

Respectfully submitted.

GRACE ABBOTT, *Chief.*

Hon. JAMES J. DAVIS,
Secretary of Labor.

CHILDREN OF PRESCHOOL AGE IN GARY, IND.

INTRODUCTION.

DEFINITION.

In its entirety, the investigation made by the Children's Bureau in Gary, Ind., in 1918 was designed to furnish a picture of the conditions surrounding children prior to their admission to school.[1] The present report will consider the conditions surrounding the children born during the five years 1911 to 1915 who were living in Gary in March, 1918—a group composed primarily of children of preschool age. All children born in 1911 would have reached 6 years of age by the close of 1917 and some would have entered their eighth year early in the year 1918. But by far the greater proportion of the children were under the age of 7 years. The minimum compulsory school age for children not physically or mentally disqualified was in Indiana 7 years; but in Gary, as in many other cities, children might and did enter the first grade when 6 years of age. In view of the short time that the children attending school had been under the school's influence and supervision, it is reasonably accurate to describe the entire group as of preschool age.

REASONS FOR STUDY.

Only within comparatively recent years has any widespread interest been taken in the child 2 to 7 years of age. Even yet there persists a lack of information and accessible knowledge about the preschool child, his needs, his nurture, and his general well-being. The connection between a child's physical condition and his ability to grasp and assimilate the knowledge which the schools have to impart has been demonstrated repeatedly by medical inspection of school children. Such medical inspection revealed the presence of defects of sight or hearing, of faulty teeth, poor nutrition, adenoids, and enlarged or diseased tonsils, among a considerable proportion of these children. Presently it was observed that a by no means negligible proportion of entrants into the first grade were hampered by physical defects which had fastened upon them during the preschool age. In the light of this discovery rather than in any other way, the preschool child began to secure the attention of his community.

[1] This is the third report dealing with the Gary investigation. The others are: Infant Mortality: Results of a Field Study in Gary, Ind., Based on Births in One Year, by Elizabeth Hughes, U. S. Children's Bureau Publication No. 112; and Physical Status of Preschool Children, Gary, Ind., by Anna E. Rude, M. D., U. S. Children's Bureau Publication No. 111.

This study is concerned not with the physical condition of children 2 to 7 years of age, which is treated of in a separate report, but with the habits of life these children were forming, the economic and social conditions surrounding them, and the environmental conditions under which they were living in this representative industrial city.

Part I deals with the general conditions affecting the children and Part II with their diet.

METHOD.

Few cities know either the exact number or the precise whereabouts of their children 2 to 7 years of age. No public records comparable to birth certificates and no such compulsory records as the public schools keep for children of school age are available in most cities for the preschool child. In order to ascertain how many children born in the years 1911 to 1915 were resident in Gary in March, 1918, a house-to-house canvass of the city was necessary. This canvass was made in February, 1918.

The next step was to visit the mother of each child and with her cooperation secure the information called for by a schedule designed to bring out the conditions surrounding children of the age here considered. Certain definite limitations were imposed by the use of the method of investigation based on a single interview. To have included questions on the schedule which a mother could not reasonably be expected to answer with understanding and comparative ease and accuracy would have been unwise and unprofitable. Consequently no attempt was made to secure certain types of information though its importance was recognized. For example, a rough indication of the diet of children 2 to 7, its adequacy and suitability, could be secured, but to ascertain in calories the actual value of a meal eaten, its sufficiency and fitness for the needs of an individual child, was not possible.

Schedules were obtained for 6,015 children—in 3,991 families—who had been born during the years 1911 to 1915, and were living in Gary in March, 1918. The information which these schedules bore is the basis for the discussion which follows. A general idea of the specific questions asked and the character of knowledge sought may be secured by examining the schedule form used. (See p. 132.)

PART I. GENERAL CONDITIONS AFFECTING CHILD WELFARE.

COMMUNITY CONDITIONS SURROUNDING CHILD LIFE.

To the north of Gary stretches Lake Michigan, an open pathway to the vast ore deposits of the northwest; to the south and east lie great coal fields. Railroads furnish means of communication and of distribution of finished products. Large markets are readily accessible.

Before 1906, the year in which Gary was founded, the southern shore of the lake was bordered by softly rounded hills and knolls of sand, bare save for such sparse vegetation as could win precarious foothold and hard-fought life against the odds of such soil. Gnarled and stunted scrub oak was the most common tree growth, interspersed with a few undersized, weather-beaten pines. The Grand Calumet River following the curve of the lake shore joined itself to Lake Michigan both east and west of what is now Gary. Pools filled some of the many hollows in the land and marshes were not wanting. In fact, a belt of land 10 or 12 miles wide around the southern shore of Lake Michigan had been discovered as early as 1834 to be "of very poor quality and worthless except in places where well-timbered." For a city whose basic industry was to be steel, however, it was a most strategic location and placed no insurmountable obstacles in the way of factory building and city planning. Moreover, it was practically unpeopled. Because of the possibilities the location offered, a steel corporation decided to erect steel mills on it and foster the growth of an industrial city for the workmen of the mills to live in.

City planning.

The steel company acquired a tract of 20 square miles, in order to make possible the most desirable arrangement for mills, to have space on which allied factories could be constructed, and to assure ground for the city which should house employees. The lake frontage of 7 miles was reserved for the mills. The city, it was purposed, should lie for the most part south of the Grand Calumet—that is to say, about a mile inland from the lake shore.

The high degree of forethought, the scientific planning, the efficient arrangement, the economy, which were evident in the industrial plants north of the Grand Calumet, had not characterized in equal degree the development of the city south of that river. Gary was not an example of excellent city planning; in some of its characteristics it was very much akin to the older industrial cities; it had

embryonic possibilities of difficult transportation and traffic problems; it had potential overcrowded areas, although there was sufficient land for expansion; the lake front, its greatest natural beauty, was almost completely given over to the steel mills and manufactories using steel products, and no park along the shore had been reserved for the recreation of Gary citizens.[1] Streets were laid out on the rectangular or gridiron plan; no provision was made for the diagonal thoroughfares modern city planning advocates as a means of reducing crosstown travel and affording variety. Broadway, the main north and south street, began at the mill gates. Intersecting it at right angles a few blocks from its beginning was Fifth Avenue, the main east and west business street. It was reasonable to expect that the city in its growth would expand chiefly east and west, following the expansion of steel and allied industries along the lake shore. Actually, growth had been quite as extensive along the main north and south street, which is now 6 miles in length.

Sewer system and water supply.

In providing a sewer system and a water system for the city to be created, greater appreciation and forecasting of future needs was shown. A land company—the subsidiary to which the steel corporation had intrusted the development of the portion of its holdings not dedicated to the industry itself—before opening a district for residence, paved streets and laid water and sewer mains in the alleys, so that when extension work was to be done or repairs made streets need not be disturbed. Both sewer and water systems have been so constructed that they can readily be extended to other subdivisions of the city not developed by the land company. Sewers become a part of the city system, and are maintained and repaired by the city. The capacity of the water system is sufficient for a city four times as large as Gary has yet become. The continued excellence of the water is carefully safeguarded and its purity watched by city and State health officials, as well as by the heat, light, and water company to which the town and the steel corporation gave over the function of furnishing the city and mills with water.

Civic action and provision.

Gary was incorporated as a town in 1906; as a city in 1909. There was in 1918 no plan in operation for governing the way in which the city should grow; no attempt had been made to break the monotony of the scheme on which streets had been laid out. As was perhaps natural in so rapidly growing a community, problems came into existence

[1] The annexation of the town of Miller in 1919 has made possible the acquisition of a lake-front park and the preservation for pleasure purposes of one of the most interesting and typical parts of the Indiana dune country. To the present citizens, however, not to the original planners of the city, will belong the credit if this outdoor playground is provided for Gary's people.

almost before their possibility had been foreseen. The unskilled immigrant laborer found practically no provision for his housing by the land company, and was dependent upon private speculative enterprise for the house in which he might dwell. Workingmen's houses built for profit proved no better from the standpoint of good housing than is usual. Adequate building regulations were slow to appear; even in 1918 the chief dependence of the city was upon the State housing law passed in 1913, and no satisfactory ordinances covered the construction of one-family houses and enforcement of the obligation of connecting with the city sewer system. In 1910, Tolleston—a town laid out in 1863—became a part of the corporate life of Gary by annexation. In 1918 rural conditions for the most part still prevailed in that section. In another part of the city lingered two shack districts reminiscent of the early pioneer days when building could scarcely hope to keep abreast of the spectacular increase in population. Housing shortage severe enough to hamper the passage and enforcement of regulations governing building and sanitation has existed in Gary practically from the beginning.

The community functions of garbage collection and disposal were receiving regular attention by the end of 1918; street cleaning and inspection of alleys were also looked after. The city was protecting its milk and food supply by an excellent ordinance enforced by one milk and food inspector. A sanitary inspector and his deputy were instructed to be constantly alert to discover conditions within house, yard, business premises, or public halls which might constitute a menace to city health and well-being. Regulations governed the control of contagious disease; the health officer, however, was but a part-time official and had but one nurse to assist him. (Another trained nurse was employed by the city during the summer months of 1918 as a member of the police staff, to do infant welfare work in the South Side.) The municipal laboratory, in charge of the city chemist and bacteriologist, was equipped to render the services required of it.

Provision made by Gary's educational system for educating both the city's youth and its foreign-born adults is pertinent to this report only in respect to kindergarten features, and playgrounds which the small child, as well as the school boy and girl, has opportunity to use.

In 1918 the city had provided but one municipal playground aside from the playgrounds about the schoolhouses. This playground, a fully equipped plot of 5 acres, contained a pool, a diamond, and tennis courts. (Plate I.) The city hoped to provide enough play space throughout its limits so that playgrounds would be easily and safely accessible to children living in every part of the city.

The land company had beautified and given to the city two parks with an aggregate of 25 acres, located in the subdivision first developed. Later a further gift of 12 acres was made by the company, for the special benefit of residents of the South Side and Tolleston. Setting aside and improving land for an additional park was being considered by the municipality at the time the investigation was made.

By annexation and addition, the area within the corporate limits of Gary had increased by 1918 to 31 square miles. In 1917 the population was estimated at 56,000.[2] Inasmuch as no inconsiderable portion of the city's area had remained rural in character, the density of population in the closely built sections was much greater than would have been the case had distribution been more even. Comparatively few large districts, however, were so crowded that children 2 to 7 years of age had altogether inadequate play space.

Following the precedent set by other communities in the United States, Gary had introduced medical inspection into its public schools and had become more or less conscious of the needlessly high rate at which its babies under 1 year of age were dying, especially in the more crowded sections of the city, inhabited largely by the foreign born. Prior to 1918 the child 2 to 7 had received little notice. When in 1918 a city-paid nurse was placed in charge of a welfare station which had been established under the auspices of a settlement in the center of the foreign-born community on the South Side, children of preschool age as well as infants were included among those to whom the station and the nurse ministered. One nurse and one station were altogether inadequate to meet the need, but a beginning had been made.

In short, the community protected child life through safeguarding water and milk supply, regulating in some measure the housing conditions, providing sanitation and health protection, and developing to some extent community resources for healthful outdoor recreation for small children. What the shortcomings of community control and protection were will appear as different phases of life in the homes of children are examined.

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[2] U. S. Bureau of the Census, Birth Statistics, 1917, p. 24. Washington, 1919. The 1920 census showed a population of 55,378.

PLATE I.—THE MUNICIPAL PLAYGROUND.

PLATE II.—COMPANY HOUSES OF THE OLDER TYPE.

HOME AND FAMILY CONDITIONS SURROUNDING CHILDREN 2 TO 7 YEARS OF AGE.

Nationality.

Gary has had from its beginning a large proportion of citizens of foreign birth. The United States Census of 1910 showed that half the city's population, aside from the 2 per cent which was Negro, was foreign born, and that the largest proportions of this group were Austro-Hungarian, Russian, Italian, and German by birth.[3] In 1920, according to census figures,[4] the foreign born constituted somewhat less than one-third of the population, and the foreign nationalities most largely represented were the Polish, Austrian, Yugo-Slavic, Russian, and Greek.

Almost two-thirds (65 per cent) of the children here considered had mothers born outside the United States; a little more than three-tenths had native white mothers; 1 child in 25 was of colored parentage.

Foreign-born mothers were of many different nationalities. The mother of about 1 child in 7 was Polish; of 1 in 10, Serbo-Croatian; of 1 in 11, Slovak; and of 1 in 20, Magyar. Children of Italian, German, and Lithuanian mothers each comprised 4 per cent of the total. One hundred and six children were of Great Russian extraction. The mothers of 8 per cent of the total had come from the nations of northwestern or western Europe and the British Isles; the mothers of 36 per cent came from the countries of southeastern and southern Europe; the mothers of 44 per cent were of Slavic peoples.

The mothers in 34 per cent of the 3,991 families containing children of preschool age were native white; in 4 per cent, colored; and in 62 per cent, foreign born. Families were somewhat larger among the foreign-born women than among either native white or colored mothers. Seventy per cent of the families with native white mothers had but one living child of this age, as compared with 51 per cent of those with foreign-born mothers. On the other hand, 10 per cent of the families with foreign-born mothers had three children of preschool age, while of those with native white or with colored mothers the percentage was but 4. (Table 1.)

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[3] Thirteenth Census of the United States, 1910, Vol. II, Population, p. 568. Washington, 1913.
[4] Fourteenth Census of the U. S., Vol. III, Population, 1920, p. 307.

TABLE 1.—*Number of children in family, by color and nationality of mother.*

Color and nationality of mother.	Number of families with children 2 to 7 years of age.									
	Total families.	1		2		3		4		5	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number	Per cent.
Total	3,991	2,322	58.2	1,336	33.5	312	7.8	20	0.5	1	(2)
Native white	1,356	944	69.7	345	25.4	60	4.4	7	0.5	.....	.....
Foreign-born white	2,457	1,248	50.8	952	38.8	245	10.0	12	0.5	.....	.....
Polish	567	279	49.1	223	39.4	62	11.0	3	0.5	.....	.....
Serbo-Croatian	350	163	46.6	142	40.6	40	11.4	5	1.4	.....	.....
Slovak	344	174	50.6	138	40.1	32	9.3	.....	.....	.....	.....
Magyar	180	89	49.4	71	39.4	20	11.1	.....	.....	.....	.....
Italian	154	67	43.5	63	40.9	24	15.6	.....	.....	.....	.....
German	150	83	55.3	56	37.3	11	7.3	.....	.....	.....	.....
Lithuanian	137	62	45.3	62	45.3	13	9.5	.....	.....	.....	.....
All other	575	331	57.6	197	34.3	43	7.5	4	0.7	.....	.....
Negro	172	124	72.1	39	22.7	7	4.1	1	0.6	1	0.6
Not reported	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

[2] Less than one-tenth of 1 per cent.

Non-English-speaking nationalities.—With the exception of mothers born in the British Isles (the mothers of 137 children, or 2 per cent, were in this group) and Canada, not including French Canadians (the mothers of 26 children), foreign-born mothers belonged to non-English-speaking nationalities. The preponderance of Slavs gave the foreign-born group a more homogeneous character than it might have had if the leading nationalities had not possessed so many common customs and ideals and shared such similar racial experiences.

Comparatively close and long association of Lithuanians, Magyars, and Rumanians with some of the Slavic races, moreover, has brought about some points of resemblance in culture and habits between them and the Slavs. In a new land national antagonisms based chiefly upon political disagreements of the Old World tend to break down and different nationalities become more conscious of their likeness to one another than of their dissimilarity. At any rate there was very little segregation of nationality groups into compact colonies wherein the order of life could be little affected by existence in a New World environment. Then, too, the very youthfulness of Gary, its visible growth, its alteration almost from day to day, must have tended to make all its inhabitants think very largely in terms of present or future, dwell less upon the past and the old, be less static than dynamic, and consider change and the adoption of new ways and customs normal. In addition the public schools exerted a very real influence over the life of the community and its various nationality groups, not only through the children but also through adults who enrolled in night classes in English, cooking, home management, sewing, foundry work, electricity, and other interesting yet practical subjects.

Ability to speak English.—Thirty-seven per cent of the 6,015 children of preschool age had mothers unable to speak English; 11 per cent had fathers who could not speak English. (Table 2.) Mothers, because of their close connection with home and children and lesser contact with outside business and industry, would be slow to acquire a language other than their native tongue. Fathers, on the contrary, would hear English spoken much more in streets, stores, and places of employment, and be forced in connection with their labor to adopt at least a small English vocabulary. Acquisition of English by the foreign born is of importance in that it makes possible better and fuller utilization of community resources, medical, social, and educational. To a mother it opens means otherwise unavailable of obtaining information on the care of home and children. To be incapable of speaking English in an English-speaking country constitutes a social and economic handicap for mother and father alike.

Inability to speak English was greatest among Polish mothers, least among German mothers. Serbo-Croatians, Lithuanians, and Italians had made less progress in acquiring English than had Slovak and Magyar mothers.

TABLE 2.—*Ability of mother to speak English, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.						
	Total.	Mother able to speak English.		Mother not able to speak English.		Mother's ability to speak English not reported.	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]
Total	6,015	3,806	63.3	2,202	36.6	7	0.1
Native white	1,843	1,838	99.7	4	0.2	1	0.1
Foreign-born white	3,934	1,735	44.1	2,198	55.9	1	(2)
Polish	923	184	19.9	738	80.0	1	0.1
Serbo-Croatian	587	172	29.3	415	70.7	.....	.....
Slovak	546	280	51.3	266	48.7	.....	.....
Magyar	291	190	65.3	101	34.7	.....	.....
Italian	265	100	37.7	165	62.3	.....	.....
German	228	203	89.0	25	11.0	.....	.....
Lithuanian	225	77	34.2	148	65.8	.....	.....
All other[3]	869	529	60.9	340	39.1	.....	.....
Negro	232	232	100.0	.....	.....	.....	.....
Not reported	6	1	.....	.....	.....	5	.....

[1] Not shown where base is less than 100.
[2] Less than one-tenth of 1 per cent.
[3] Includes 106 Great Russian, 97 Rumanian, 85 Little Russian, 76 Irish, 73 Danish, Swedish, and Norwegian, 73 Jewish (Russian), 71 Bohemian and Moravian, 61 English, Scotch, and Welsh, 58 Greek, 38 Slovenian, 26 Canadian (other than French), 22 Jewish (other than Russian), 25 Spanish (21 European, 1 Mexican, 3 other), 14 Assyrian, 14 Bulgarian, 9 Persian, 6 Dutch and Flemish Belgian, 3 French and Walloon, 3 French Canadian, 2 Albanian, 7 other foreign-born white, nationality not specified.

Years in the United States.—Mothers of but 3 per cent of the children had been in the United States less than five years. Among the larger non-English-speaking groups no marked difference in length of residence in this country was observable. Mothers of at least

nine-tenths of the children in each foreign nationality group represented had been in the United States five years or longer. (General Table I, p. 139.)

Literacy.

Only 9 children had native white mothers who reported themselves unable to read and write, whereas 1,378 children had foreign-born mothers who could not claim ability to read and write in any language, and 14 colored children had illiterate mothers. (Table 3.) In short, nearly one-fourth of all the children (23 per cent) had mothers whose opportunity to secure knowledge and profit by instruction was limited to the medium of the spoken word. Like inability to speak English, illiteracy was significant mainly because it increased a mother's isolation and restricted her chance to learn.

TABLE 3.—*Literacy of mother, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.						
	Total.	Mother literate.		Mother illiterate.		Mother's literacy not reported.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]
Total	6,015	4,596	76.4	1,401	23.3	18	0.3
Native white	1,843	1,832	99.4	9	0.5	2	.1
Foreign-born white	3,934	2,548	64.8	1,378	35.0	8	.2
Polish	923	546	59.2	375	40.6	2	.2
Serbo-Croatian	587	258	44.0	325	55.4	4	.7
Slovak	546	415	76.0	130	23.8	1	.2
Magyar	291	260	89.3	31	10.7	.....	.....
Italian	265	144	54.3	121	45.7	.....	.....
German	228	215	94.3	13	5.7	.....	.....
Lithuanian	225	74	32.9	151	67.1	.....	.....
All other	869	636	73.2	232	26.7	1	.1
Negro	232	216	93.1	14	6.0	2	.9
Not reported	6	.....	.....	.....	.....	6	.....

[1] Not shown where base is less than 100.

Literacy was greater among fathers than among mothers. But 1 child in 8 had a father who was said to be unable to read or write. Though high intelligence may sometimes be associated with illiteracy, inability to read or write is likely to be associated with ignorance and a low economic level through its untoward influence over earning capacity and the restriction it places upon choice of occupation.

The proportion (67 per cent) of children with illiterate mothers was far higher among Lithuanians than in any other nationality group. Next to Lithuanians, Serbo-Croatians (55 per cent) and Italians (46 per cent) showed the greatest amount of illiteracy. Among the children of Magyar mothers, on the contrary, the proportion (11 per cent) was much lower and among the children of German mothers (6 per cent) it was more closely analogous to the proportion among the native white.

Composition of family.

A father, a mother, and one or more children are the necessary elements of the family as a unit in society. In this study, a family has been considered normal only if both mother and father were present in the home. Continued absence of one or both parents, from any cause whatsoever, renders the family incomplete and somewhat alters conditions of life for the child. By far the largest number of children of preschool age in Gary were growing up in normal families as here defined. (Table 4.) Six per cent, however, were living in homes broken by the death, desertion, or prolonged absence of one or both parents, or in families containing none but foster or boarding children. Of the boys and girls 2 to 7 years of age, practically 95 out of every 100 were being cared for by father and mother in homes maintained by both.

TABLE 4.—*Composition of family.*

Composition of family	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
Normal	5,628	93.6
Father absent	250	4.2
Mother absent	60	1.0
Both parents absent	73	1.2
Not reported	4	(1)

[1] Less than one-tenth of 1 per cent.

Duration and stability of family life.

Sixty-nine per cent of the 3,991 families in which children 2 to 7 years of age were found had existed at least seven years; 18 per cent had had a life of five years but less than seven years; and only 11 per cent had a history of less than five years. Sixty-nine families (less than 2 per cent) contained only foster or boarding children.

Families with children of preschool age formed a very stable part of the community; they were not of the type which changes place of residence often. In the period covered by the life of children born in 1911 to 1915, that is, in a span of approximately seven years, practically four-fifths of the families had moved from one city to another but once or not at all; an additional eighth had changed their city of residence twice; only 7 per cent had moved three times or more. (Table 5.)

TABLE 5.—*Number of removals from city to city between January 1, 1911, and March 1, 1918, by duration of family history.*

Duration of family history.	Families with children 2 to 7 years of age.										
	Total.	No removals.		Number of removals from city to city between January 1, 1911, and March 1, 1918.						Not reported whether removed	
				1		2		3 and over.			
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]
Total	3,991	1,499	37.6	1,651	41.4	472	11.8	291	7.3	78	2.0
2 years, less than 3	8	4	.....	2	.....	2	.....	.....	.....	.....	.....
3 years, less than 5	431	244	56.6	121	28.1	43	10.0	23	5.3	.....	.....
5 years, less than 7	712	331	46.5	246	34.6	85	11.9	49	6.9	1	0.1
7 years and over	2,758	916	33.2	1,276	46.2	340	12.3	219	7.9	7	0.3
Not reported	13	4	.....	6	.....	2	.....	.....	.....	1	.....
Foster or boarding children only	69	.....	.....	.....	.....	.....	.....	.....	.....	69	.....

[1] Not shown where base is less than 100.

Size of family.

For this study, immediate blood relationship to the child 2 to 7 years of age was made the determining factor in fixing family limits. On this basis an adopted or boarding child would ordinarily constitute the only member of his family in a household. Families made up of one or two individuals, therefore, include chiefly boarding or foster children, and children in broken homes. More children were living in families numbering five persons than in those of any other size. Families with from four to six members contained two-thirds of the 6,015 children born in the period 1911 to 1915. A tenth of the children lived in families of three; a ninth, in families of seven; a ninth in those numbering eight or more. (General Table II, p. 140.) The inclusion was limited to members of the family actually resident in the home at the time of the visit of the Children's Bureau agent; it covered married sons and daughters living at home and working boys and girls as well as children dependent upon their parents.

Nearly three-fifths (58 per cent) of the families containing children of preschool age had but one such child; about one-third had two children born in the selected period, while slightly less than one-twelfth had as many as three children born in the years specified. In 20 families there were four preschool children; one family had five such children. These 21 families, however, formed less than 1 per cent of the entire number of families. Of the babies born in 1916, 1,040 were living in families having also children of preschool age; the average number of young children in each home was about two. (Table 6.)

TABLE 6.—*Number of children born in 1916 living in family, by number of children born 1911–1915.*

Number of children born in 1916 living in family.	Families with children 2 to 7 years of age.					
	Total.	Number of children born 1911–1915.				
		1	2	3	4	5
Total	3,991	2,322	1,336	312	20	1
None	2,951	1,721	973	238	18	1
1	1,037	599	362	74	2	.....
2	3	2	1	.....	.....	.....

Distribution in city.

The First Subdivision, of which Kirk forms the northern part and which is bordered on the west by Ambridge, was the part of Gary that had been most completely developed by the land company. It was built first and was the most completely supplied with sewer and water systems. The First Subdivision lies almost entirely south of the Grand Calumet, with Fifth Avenue—the main east and west street—as its long axis and Broadway as its short one. South of the First Subdivision lie the South Side and Tolleston, the former the part of the city to which the unskilled foreign workman resorted and which he developed through private enterprise, insufficiently aided and directed by community supervision; the latter is an older town, largely rural, having many foreign-born residents. Still farther south, flanking Broadway toward its farthest extremity, lie Ridge Road and Glen Park, a district more pleasing in natural surroundings and developing into a good residential section. To the northwest lie Clark and Pine, tiny settlements, which in 1918 had been but little affected by inclusion within the city limits of Gary. West Gary was still only sparsely settled, but the houses erected in it were for the most part of good quality. Lincoln Park, adjoining Tolleston on the south, was also sparsely settled.

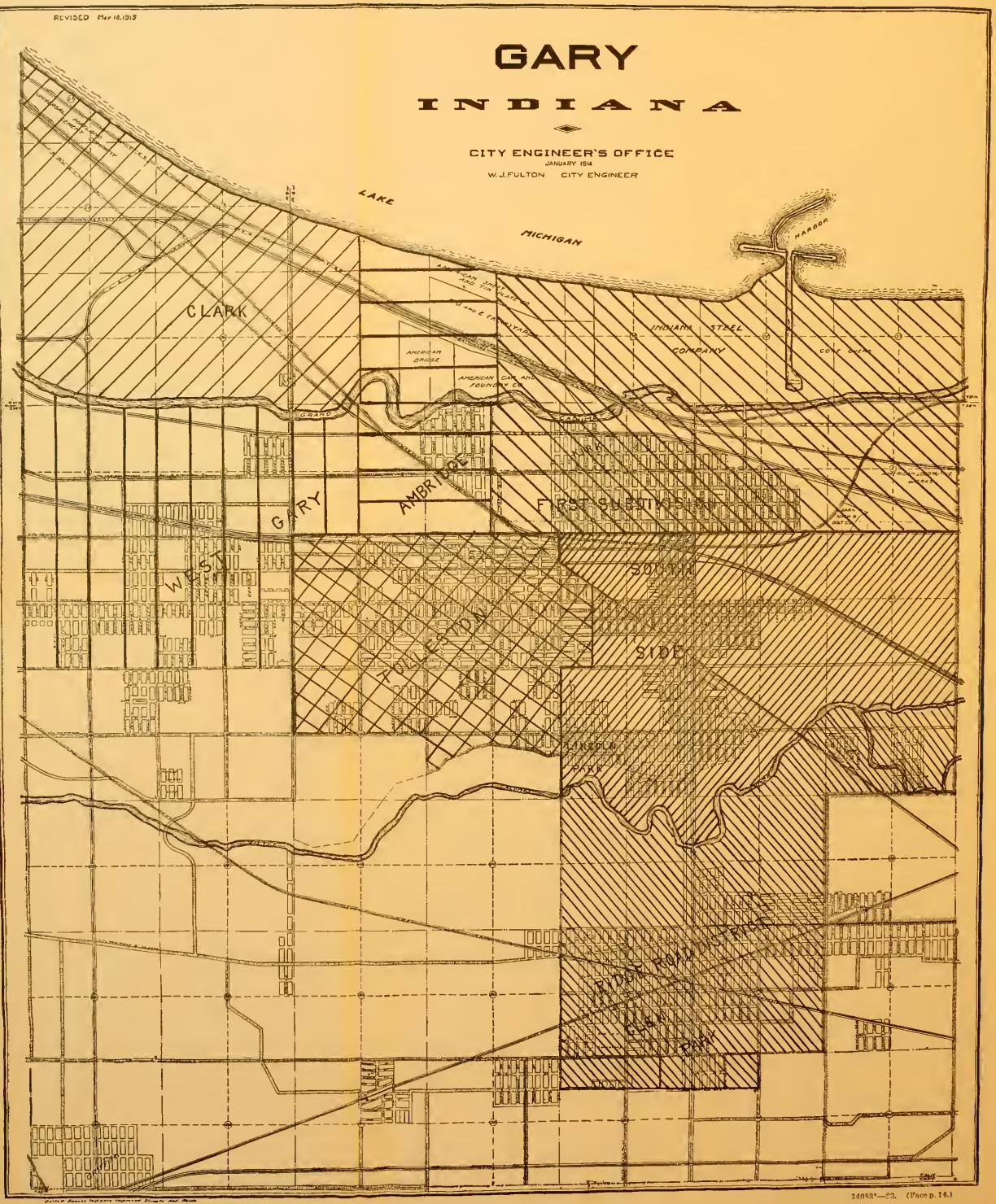
The South Side, the residence of 46 per cent of the 3,991 families included in the study, was the home of almost half (48 per cent) the children of preschool age in the city. (Table 7.) The First Subdivision, with 28 per cent of the families, had one-fourth of the children of this age, and Tolleston, with 14 per cent of the families, had a little more than one-seventh of the children. In other words, almost two-thirds of the children were living in districts more largely of foreign-born population, and less well developed as to sanitation, than other parts of the city.

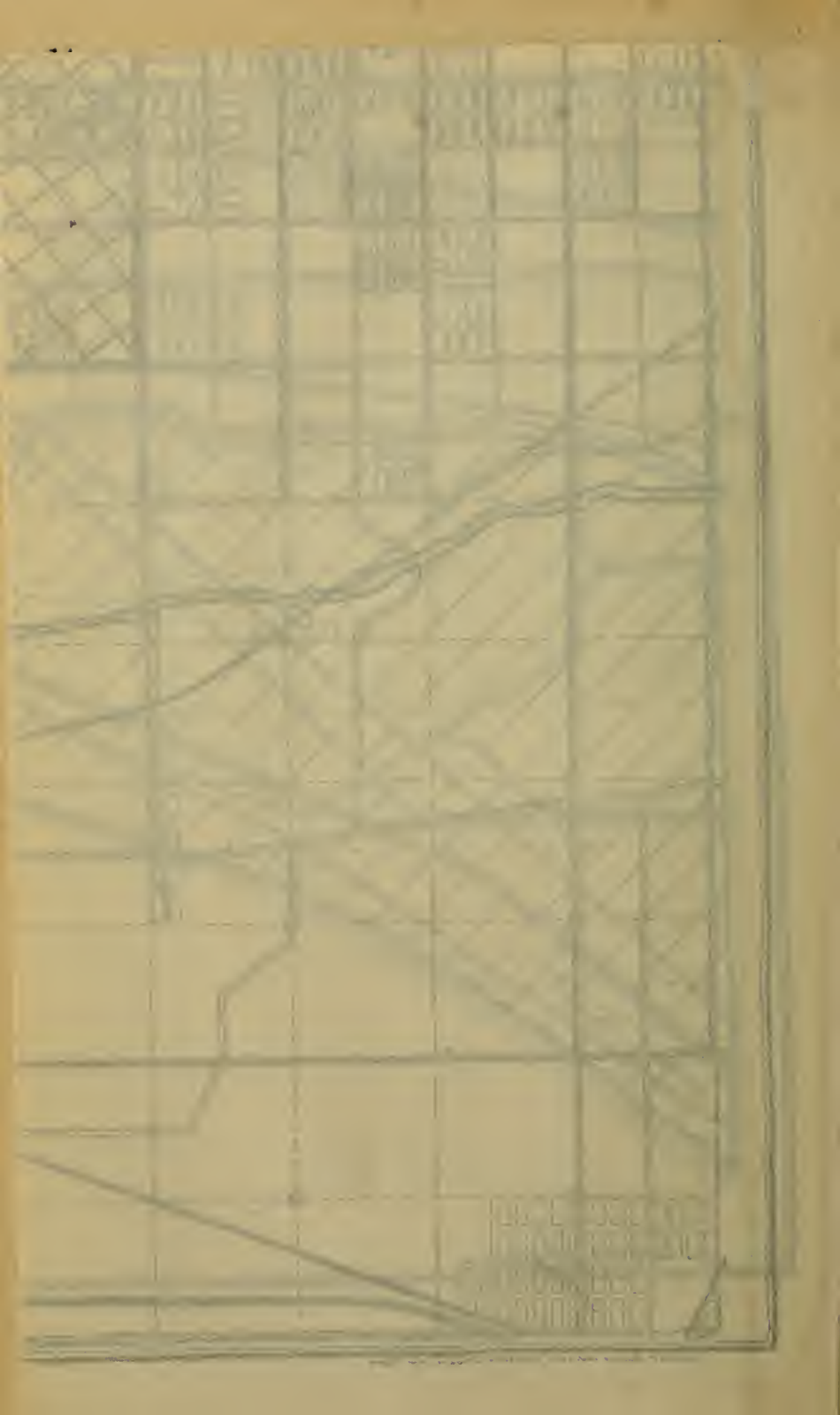
TABLE 7.—*Number of children in family, by district of residence.*

District of residence.	Families with children 2 to 7 years of age.									
	Total.	Number of children.								
		1		2		3		4		5	
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.
Total	3,991	2,322	58.2	1,336	33.5	312	7.8	20	0.5	1	(2)
Ambridge	119	82	68.9	31	26.1	6	5.0	.....	.....	.....	.....
Clark	24	13	.....	7	.....	3	.....	1	.....	.....	.....
First Subdivision	1,099	762	69.4	285	25.8	44	4.0	8	.7	.....	.....
Lincoln Park	61	26	.....	32	.....	3	.....	.....	.....	.....	.....
Ridge Road and Glen Park	266	160	60.2	85	32.0	21	7.9	.....	.....	.....	.....
South Side	1,835	974	53.1	677	36.9	175	9.5	8	.4	1	0.1
Tolleston	557	286	51.3	210	37.7	58	10.4	3	.5	.....	.....
West Gary	30	19	.....	9	.....	2	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

[2] Less than one-tenth of 1 per cent


REVISED Mar 16, 1913
GARY
INDIANA
CITY ENGINEER'S OFFICE
JANUARY 1914
W. J. FULTON CITY ENGINEER
LAKE
MICHIGAN
HARBOR
CLARK
INDIANA STEEL COMPANY
COKE PLANT
AMERICAN BRIDGE
AMERICAN CAR AND FOUNDRY CO
GRAND
GARY
AMBRIDGE
FIRST SUBDIVISION
WEST SIDE
SOUTH SIDE
MIDDLE SECTION
LINCOLN PARK
RIVER FRONT PARK



HOUSING.

From the standpoint of human welfare, housing has long been of interest; from the industrial side it has in recent years acquired more and more importance as a factor contributory to the content or the unrest of labor. Housing evils epitomized in brick and stone have great permanence; no inconsiderable proportion of the industrial population of our great cities to-day is housed in accordance with the mistakes of yesterday because those errors have outlasted the generation which made them.

To bring forward actual statistical proof of the interrelation between housing and well-being is not easy, because housing is but one of many factors affecting life and welfare. Bad housing can, however, be judged by the company it keeps; its common associates are poverty, ignorance, vice, and crime. A community can partially protect its citizens from these by preventing the erection of unsuitable or unfit dwellings, through the adoption of proper legislative measures.

Legislation.

Building ordinances and regulations, and provisions made for supervision and sanitation, show the minimum housing standards which a community upholds. As already stated, regulations were slow to appear in Gary. A ready-made city must in no little measure have antedated its citizenship and could have developed civic consciousness only after it had been in existence for some time. Realization of problems requiring regulation would be likely to be somewhat tardy.

While still a town, Gary created a department of buildings. In 1910, the city confirmed the establishment of such a department and designated a commissioner of buildings as its chief official. To the commissioner were to be submitted plans for all buildings proposed for erection in the city. Building might proceed only when the commissioner had granted a permit after approval of the plan submitted. The next year saw the passage of an ordinance to regulate and govern plumbing in the city, and provision for the appointment of an inspector of plumbing and house drainage, and a board of examiners to pass upon the qualifications of those desiring to practice plumbing. By 1918, in addition to the building commissioner, the plumbing inspector, and clerical assistance for both these officials, the city had made provision for a sanitary inspector and his deputy.

Among the early ordinances were those fixing fire limits in the city and regulating building within them. An ordinance passed early in 1910 and amended later in the same year and in 1914 contained the chief regulations and provisions made by the city to control the construction of buildings. In addition to requirements relative to material to be used, structure of walls, excavations, floor loads, stairs, and fireproof partitions, and rules concerning the installation of electric wiring, dwellings are defined and classified by the ordinance as follows: Residence, "a building used by not more than two families as a dwelling"; flat building, "any building designed and intended for use as a residence for three or more families, and shall include lodging house and apartment building." A basement story is defined as "a story the floor of which is 3 feet or more below the sidewalk, and does not extend any higher than 11 feet in clear and is suitable for habitation." Further, "no room in lodging or apartment buildings shall be considered habitable unless it has at least one window of an area equal to one-tenth the superficial area of such a room, opening into the external air." The size of light and air shafts for habitable rooms in "flat buildings" is specified, and provision is made that every court or light shaft in any such building shall be opened and unobstructed from floor to outer air. Condemnation of a building as dangerous or insecure from the structural standpoint is made possible by this ordinance.

Not until 1913, when the housing law of the State of Indiana became applicable to Gary, did anything more far-reaching and detailed than the above exist to govern such important matters as the percentage of a lot which might be covered, the use of one lot for more than one building, the more exact definition of what should constitute a habitable room or basement, installation of sewer connections and the use of city water supply, the regulation of size of rooms, the provision of sanitary conveniences, the formulation of a standard by which overcrowding within a room might be measured, and the condemnation of a building as unfit because insanitary and a menace to the health of its occupants.

The act of 1913 applied only to a tenement house, that is, "the home or residence of two or more families living independently of each other and having a common right in the halls, stairways, yard, cellar, water-closets or privies, or any of them." Much of Gary was built before 1913, in absence of regulations sufficient to guard against possible housing evils in the tenements constructed. Most of the act of 1913 was not applicable to tenements existing prior to its passage. But even more important, from the standpoint of housing in Gary, was the fact that no provision had been made either in State law or city ordinance to enforce standards for one-family houses, or to prevent continued use of one lot for more than one such house, or

PLATE III.—EXCEPTIONALLY GOOD COMPANY HOUSES IN AMBRIDGE.

PLATE IV.—MODERN CEMENT HOUSES.

[Note broad streets, the pavements, lawns, and sidewalks.]

to make impossible refusal to connect a one-family house with sewer and water mains. Consciousness of the menace inherent in the lack of more careful regulation was growing. In 1919, the annual message of the mayor charged the city council that the city's building ordinance, in particular, needed amendment "so that every encouragement be made for the construction of houses, health and sanitation in all cases regarded."

Not only was the definition of overcrowding in the State law confined to rooms in tenement houses, but the law was further limited because enforcement of the standard as to what constituted overcrowding and what rendered a tenement uninhabitable was permissive and not mandatory, discretion resting with the board of health.

Company housing.

Land company housing projects had been confined chiefly to the First Subdivision, Kirk, and Ambridge; the other subdivisions of the city had been developed by private enterprise. Company housing varied. The families of the employees of the freight railroad which serves the mills lived in small frame houses, very similar in style of construction. On the whole the houses which had been erected for the men working in the steel mills were good, substantially constructed buildings, varied in plan and appearance. The "double dry goods boxes," as the buildings first erected to accommodate the unskilled immigrant laborer were called, were quite uniform and stereotyped but not numerous enough to be prominent. (Plate II.) Houses in Ambridge were like those in the First Subdivision, chiefly frame or brick and frame, and of varied architecture. (Plate III.) The dwellings for the employees of one company were easily distinguishable from other company housing because of the use of plaster and cement. Among these buildings were some cement houses in terrace formation, but of several patterns. (Plate IV.) The faults of monotonous regularity and uniformity, which have so often characterized housing provided by employers in mill villages and towns, had been in large measure avoided by the land company.

The land company desired to construct modern houses, and with this in mind opened no district for residence without first having paved the streets and laid the water and sewer mains. One-family detached or semidetached houses predominated among the buildings erected by the company, though apartment buildings also were constructed, as well as the terrace houses mentioned above. In the residence portion of the First Subdivision, a uniform building line 30 feet from the front of the lot was adopted and insisted upon by the land company for buildings erected on its lots by private enterprise.

The undulations of the land were leveled before building was begun. The barren sand was especially drear when unrelievedly flat. The land company and the town and city government had beautified the residence section of the First Subdivision. The land company had fostered the growth of lawn and of shade trees; the heat, light, and water company had supplied free water for use on lawns, and the town had passed an ordinance in 1909 requiring that the residence lots of the First Subdivision should be "improved and maintained with suitable lawns" and that shade trees should be planted in uniform position on each lot. It should not be forgotten that the formation of a lawn in Gary almost invariably entailed first overlaying the sand with black dirt. Only by bearing in mind the unresponsive character of the sand can one justly appreciate the city's accomplishments in securing lawns and shade trees.

Housing by private enterprise.

No subdivision of Gary was without examples of housing by private speculative enterprise. Houses erected in the First Subdivision by private enterprise compared very favorably with the building done by the land company. West Gary dwellings also were of good type; a few were provided with modern sanitary conveniences even though the city sewer and water systems had not yet reached them. Ridge Road and Glen Park had some beautiful and spacious residences set in pleasant grounds to counterbalance occasional poorly made huts hidden in the woods, and a number of mediocre houses lacking sewer and water connections.

In 1918 West Gary, Ridge Road, and Glen Park were still comparatively sparsely settled. Clark and Pine, older settlements, small and decidedly rural at the time of their inclusion in Gary, lacked sewers, water mains, and paved streets. Tolleston, too, was but partially served by the city sewer and water systems and had a few unpaved streets. The more recent housing in Tolleston tended to resemble that of the South Side, the subdivision of the city in which housing was poorest.

Provision for the immigrant common laborers in the steel mills was never adequate, but even the few houses erected for them by the land company were soon given over to Americanized men with families because of the way in which the first tenants of foreign birth crowded the houses with lodgers and failed to use properly unaccustomed conveniences such as bath, toilet, and sink. The South Side exemplified what the unskilled immigrant was able to secure for himself unaided by the land company and protected and helped but little by building ordinances. Examples of lot overcrowding, of rear houses, of badly constructed tenements (Plate V), of inadequate sanitary conveniences, were numerous. Perhaps the worst

PLATE V.—BADLY CONSTRUCTED AND OVERCROWDED TENEMENTS.

[The building at left, with garage in basement, houses four families; the one at right, eight families.]

PLATE VI.—A ONE-STORY FRAME SHACK.

PLATE VII.—PASSAGEWAY, 3 FEET WIDE, BETWEEN TWO FRAME SHACKS—SIX APARTMENTS IN EACH.

[Single water faucet and four privies for use of the 12 families.]

PLATE VIII.—A NINE-FAMILY TENEMENT WITH YARD CLOSET AT END OF ROW.

structures were one-story frame shacks about 100 feet long and 18 or 20 feet wide. (Plate VI.) Such shacks contained as many as eight or nine two-room apartments, each room being 9 or 10 feet square. The typical lot in Gary is 25 or 30 feet wide and 125 or 150 feet deep. If one of these shacks had been placed on an outside lot so that entrance to the apartments was directly from the sidewalk, the congestion did not seem so great. If two such buildings occupied adjoining inside lots, however, in order to enter, one had to traverse the long narrow passage between them. Plate VII depicts such a passage 3 feet wide between twin buildings which together were designed to house 12 families in three-room apartments. Plate VIII shows a nine-family dwelling of two-room apartments, and makes clear how such a structure on an inside lot must depend for light and air upon uncovered space on the neighboring lot. In the early days one pump furnished the usual water supply for such shacks. At the time of the study the 12 apartments in the shacks first pictured had been provided with a single water faucet at the end of one building; the other shack had a water faucet in a room at the rear of the ninth apartment. One yard water-closet attached to the end of the building was the sole toilet provision for the nine-family shack. Occupying the alley end of the lots on which the two six-family shacks (Plate VII) stood were four yard privies used promiscuously by all the families.

Compared to these buildings, one-family shacks of two or three rooms, thrown together from odd scraps of material after no formal plan, had at least the advantages of greater privacy; but this apparently was their chief recommendation. Accompanying illustrations (Plates IX, X, XI, XII) show the extremely makeshift, ramshackle construction common to these dwellings, and indicate how the keeping of domestic fowls and animals sometimes complicates the living problem. Two sections of the South Side contained colonies of families living in such one-family shacks, for which they paid a nominal sum yearly as ground rent. Insanitary, inconvenient, insecure in the protection they afforded against wind, rain, cold, and heat, they nevertheless continued to be used for dwellings; nor did it seem likely that they would be condemned or abandoned until the supply of suitable houses became more adequate.

The homes of the families included in this inquiry.

Type of house.—Half the children in Gary 2 to 7 years of age were living in buildings housing but one family, 22 per cent were in two-family buildings, and but slightly over a fourth (27 per cent) occupied structures accommodating three or more families. (Table 8.) Only 60 children (1 per cent) were in apartments on the third or a higher floor; 217 (4 per cent) were in basement quarters. The one- or two-

family dwelling was far more common in Gary than were large tenements or apartment buildings.

Compared with the rest of the city, the South Side and the First Subdivision were thickly settled in part of their areas at least. Almost two-fifths of the preschool children of the South Side, and one-fourth of those of the First Subdivision, were living in buildings holding three or more families; these two districts together comprised almost all the dwellings in which children of this age were living on the third floor or higher. The more rural sections of the city had, as was to be expected, the highest proportion of children housed in one-family dwellings. West Gary, Ridge Road, Glen Park, Clark, Lincoln Park, even Tolleston, had felt but little, if any, pressure necessitating the erection of multiple dwellings.

TABLE 8.—*Type of dwelling, by district of residence.*

District of residence.	Children 2 to 7 years of age.											
	Type of dwelling.											
	Total.	One-family house.		Two-family house.		House for 3 or more families.						Not reported.
						Total.		Basement	First floor.	Second floor.	Third floor or higher.	
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]					
Total	6,015	3,008	50.0	1,334	22.2	1,645	27.3	217	746	622	60	28
Ambridge	162	53	32.7	70	43.2	39	24.1	3	20	16	.....	.....
Clark	40	35	.....	4	.....	1	.....	.....	.....	1	.....	.....
First Subdivision	1,496	799	53.4	307	20.5	380	25.4	85	141	134	20	10
Lincoln Park	99	80	.....	9	.....	10	.....	.....	2	8	.....	.....
Ridge Road and Glen Park	393	347	88.3	39	9.9	6	1.5	2	1	3	.....	1
South Side	2,890	1,042	36.1	740	25.6	1,091	37.8	119	518	417	37	17
Tolleston	892	611	68.5	163	18.3	118	13.2	8	64	43	3	.....
West Gary	43	41	.....	2	.....	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

Possibilities of through and of cross ventilation should be considered in judging the suitability and structural excellence of homes in which children are being reared. Almost two-thirds of the 6,015 children of preschool age in Gary were living in dwellings which on four sides had doors or windows opening to the outer air; nine-tenths were in homes with open air on at least three sides; less than 1 per cent (46 children) were in dwellings which had openings to the air on but one side. (Table 9.) The superiority of the one-family residence in this respect is evident. Four-fifths of the children in buildings sheltering but one family lived in dwellings which had access to outside air on four sides; only one-fourth of those in buildings housing at least three families occupied apartments equally favored in possibilities of light and ventilation.

PLATE IX.—A HOME IN ONE OF THE SHACK COLONIES.

[Note hogs near well at left.]

PLATE X.—A SHACK OF MAKESHIFT CONSTRUCTION.

PLATE XI.—SIDE VIEW OF SHACK—THE KEEPING OF DOMESTIC FOWLS COMPLICATES LIVING PROBLEMS.

PLATE XII.—A DRIVEN WELL IN ONE OF THE SHACK DISTRICTS.

TABLE 9.—*Access to outside air, by type of dwelling.*

Access to outside air.	Children 2 to 7 years of age.								
	Total.		Type of dwelling.						
			One-family house.		Two-family house.		House for 3 or more families.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	3,008	100.0	1,334	100.0	1,645	100.0	28
Open air on 1 side	46	0.8	11	0.4	3	0.2	29	1.8	3
Open air on 2 sides	482	8.0	80	2.7	72	5.4	328	19.9	2
Open air on 3 sides	1,560	25.9	330	11.0	343	25.7	884	53.7	3
Open air on 4 sides	3,907	65.0	2,586	86.0	916	68.7	404	24.6	1
Not reported	20	0.3	1	(2)	.....	.....	.....	.....	19

[1] Per cent distribution not shown where base is less than 100.
[2] Less than one-tenth of 1 per cent.

Tenure and rental.—According to the United States Census of 1910, made when Gary was about 4 years old and possessed a population of 16,802, 68 per cent of the dwellings in the city were rented, and 28 per cent were owned by the people living in them.[a] This was not a high percentage of ownership, but it did not differ greatly from that obtaining in other industrial communities in Indiana. In 1918, 3,210—slightly more than one-half—of the children born from 1911 to 1915 were living in rented homes; 30 per cent were in homes owned by their parents, and 15 per cent more in homes which their parens had begun to purchase. (Table 10.) Eighty-one children 2 to 7 years of age (1 per cent of the total) were in families termed "squatters," who were occupying, for a dollar or two yearly, one-family shacks from which they might be evicted summarily.

The proportion of ownership was highest among the foreign born. A little more than one-half of the children with mothers born outside the United States were living in owned homes, as contrasted with a little over one-third of those with native white mothers, and but slightly more than one-tenth of those with colored mothers. Possibly the history of the building of Gary affords some explanation of the higher percentage of ownership among the foreign born. As mentioned above, company provision for them was slight, and they may therefore have found that to erect and own their homes was the best and most feasible method of securing houses.

[a] Thirteenth Census of the United States, 1910, vol. 1, Population, p. 1357, Washington, 1913.

TABLE 10.—*Family tenure of home, by color and nativity of mother.*

Color and nativity of mother.	Children 2 to 7 years of age.									
	Total.	Family tenure of home.								
		Owners.		Buyers.		"Squatters."		Renters.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	1,799	29.9	900	15.0	81	1.3	3,210	53.4	25	0.4
Native white	1,843	405	22.0	241	13.1	10	0.5	1,178	63.9	9	0.5
Foreign born	3,934	1,387	35.3	638	16.2	67	1.7	1,827	46.4	15	0.4
Negro	232	5	2.2	21	9.1	4	1.7	201	86.6	1	0.4
Not reported	6	2	.....	.....	.....	.....	.....	4	.....	.....	.....

[1] Not shown where base is less than 100.

Home ownership tends to stabilize the residence of a family. One-fifth of the children whose parents owned or were purchasing homes, as compared with over one-half (53 per cent) of those whose parents were tenants, had occupied the dwellings in which they were living at the time of the study less than a year. Thirty per cent of those whose parents were owners or buyers, and 5 per cent of those whose parents rented, belonged to families which had not moved for at least five years.

Considering together the children of owners and renters, 42 per cent of children with native white mothers, 35 per cent of those with mothers of foreign birth, and 72 per cent of those whose mothers were colored, belonged to families that had changed living quarters within the year. The proportion of those in families that had been at least five years in their present place of abode was highest among children with foreign mothers (18 per cent), next highest (15 per cent) among children with native white mothers, and lowest among children with colored mothers (2 per cent). (General Table III, p. 141.)

In the city as a whole, the four-room house was the type most commonly occupied by the families of children included in the study. The size of apartment most characteristic varied somewhat from district to district. For example, in Clark and in the First Subdivision homes of six rooms were the most common; in Ambridge and West Gary those with five; in Lincoln Park those with three, and in the remaining sections, homes with four rooms.

Rentals for four-room dwellings varied widely. The location of the dwelling in the basement or on another floor of a building, its situation in the city, the amount of light and air it afforded, the number of improvements it possessed—water, toilet, bath, sink, heat, light—all figured, doubtless, in relation to the amount of rent charged. In Ambridge, where all dwellings in which children 2 to 7 years of age were living were modern in their sanitary conveniences, the range of monthly

rental for four rooms was between $15 and $25; in Clark, which did not possess sewer and water systems, four-room dwellings rented for $5 to $15 a month. In the First Subdivision and the South Side, where extremes in type of accommodation available were greater, the rent of four-room dwellings was in some instances as low as $5; other dwellings of this size rented for more than $40 a month. The median monthly rental for four rooms in Gary as a whole, in 1918, was $15 to $20; in Tolleston and Clark it was $10 to $15, and in the First Subdivision, $20 to $25. Except in the last section cited, rentals did not appear to be high. (General Table IV, p. 143.)

The amount of home ownership varied considerably in different sections of the city. The proportion of children 2 to 7 years of age living in rented houses was 98 per cent in Ambridge; 28 per cent in Lincoln Park, and 70 per cent in the First Subdivision; 50 per cent in Clark and the South Side; 44 per cent in Tolleston; and 22 per cent in Ridge Road and Glen Park.

Sanitary conveniences.—To a very great degree equipment of houses with sanitary conveniences depends upon the extension of sewer and water systems in a city. Especially does this hold for workingmen's dwellings, because of the greater expense attendant upon furnishing ordinary sanitary conveniences in the absence of public water and sewer systems. In 1918, it was estimated by an official of the heat, light, and water company that 80 per cent of the people in the city could be served by the city water supply with its 80 miles of mains. This meant that the more closely built and well-peopled districts had ready access to the water supply, but did not imply that the outlying sections had been reached. Estimate of the possibility of sewer connections was even higher. The city engineer believed 95 per cent of the city's population could secure sewer connections for property. With these estimated possibilities it is of interest to compare the conditions existing in 1918 in the homes of children of preschool age.

Of the children of preschool age, 1,496, or one-fourth of the entire number in the city, were living in homes which lacked city water supply and depended wholly upon a well or cistern. (Table 11.) Forty of these children (3 per cent) lived in Clark, 43 in West Gary—to which sewer and water systems had not penetrated—110 (7 per cent) in Ridge Road and Glen Park, 617 (41 per cent) in Tolleston, and 49 (3 per cent) in Lincoln Park, districts which were but partially served; 632 (42 per cent) in the South Side and 5 (less than 1 per cent) in the First Subdivision, where both water and sewer systems were more easily accessible. In Ambridge all the children 2 to 7 years of age were living in houses provided with city water, and the First Subdivision had almost as good a record. These districts ranked as follows, in descending order, in respect to water and sewer provision: The South Side, Ridge

Road and Glen Park, Lincoln Park, and Tolleston. West Gary and Clark were totally without city water supply.

Where the city supply was lacking the source of water was ordinarily the driven well, simple and easy to construct because of the character of the soil. A pipe with a sieve over its lower end, driven into the sand to a depth of 10, 15, or 20 feet, was reasonably likely to tap a supply of ground water. An iron pump attached to the upper end of such a pipe completed the driven well. It is probable that the sandy soil was a protection against contamination of the water yielded by these wells.

TABLE 11.—*Source of water supply, by district of residence.*

District of residence.	Children 2 to 7 years of age.							
	Total.	Water supply.						
		City water only.		City and well or cistern		Well or cistern only.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	4,486	74.6	12	0.2	1,496	24.9	21	0.3
Ambridge	162	162	100.0	.....	.....	.....	.....	.....	.....
Clark	40	.....	.....	.....	.....	40	.....	.....	.....
First Subdivision	1,496	1,484	99.2	.....	.....	5	.3	7	.5
Lincoln Park	99	50	.....	.....	.....	49	.....	.....	.....
Ridge Road and Glen Park	393	280	71.2	2	0.5	110	28.0	1	.3
South Side	2,890	2,236	77.4	9	.3	632	21.9	13	.4
Tolleston	892	274	30.7	1	.1	617	69.2	.....	.....
West Gary	43	.....	.....	.....	.....	43	.....	.....	.....

[1] Not shown where base is less than 100.

From the housewife's standpoint, the desirability of water supply within the dwelling can scarcely be overemphasized. Almost four-fifths of all preschool children lived in homes which were not dependent upon water supply located outside the dwelling. (Table 12.) In Clark and West Gary, districts not reached by the city water system, the homes of practically three-fifths of the children had water supply in the dwelling. (General Table V, p. 144.) In the city as a whole, about one-eighth of the children with native white mothers, one-fourth of those with mothers of foreign birth, and one-third of those with colored mothers, lived in homes with only an outdoor water supply.

The following examples suggest what absence of water supply within the dwelling may involve:

The difficulty which a mother of four young children, living in the nine-family shack described on p. 19 would have in sharing the single water faucet with the eight other housewives, calls for no elaboration. Certainly cleanliness of home and person were very difficult to attain in such circumstances. The mother of six children, two of preschool

age, who was renting a small frame shack on the alley line back of a well-built tenement taking up the front of the lot, had neither water supply nor toilet in her own home or yard. The entire family of seven was dependent upon hydrant and water-closet in an apartment on the second floor of the building in front.

TABLE 12.—*Location of water supply, by color and nativity of mother.*

Color and nativity of mother	Children 2 to 7 years of age.						
	Total.	Location of water supply.					
		In dwelling.		Outside dwelling.		Not reported.	
		Number.	Per cent.[1]	Number	Per cent.	Number.	Per cent.
Total	6,015	4,757	79.1	1,239	20.6	19	0.3
Native white	1,843	1,621	88.0	215	11.7	7	0.4
Foreign-born white	3,934	2,981	75.8	942	23.9	11	0.3
Negro	232	149	64.2	82	35.3	1	0.4
Not reported	6	6	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

The homes of 77 per cent of all the children had been equipped with sinks, and those of 37 per cent, with bath tubs. Two-thirds of the children lived in dwellings having flushing toilets, and one-third lived in dwellings having dry yard privies. (General Table VI, p. 145.) Almost two-fifths of the children lived in houses equipped with all three sanitary conveniences—sink, water-closet, and bath; 28 per cent more had homes in which were sinks and water-closets. The homes of one-fifth lacked all these sanitary conveniences. Table 13 shows how close was the correspondence between the provision of sanitary conveniences and connection with the city water supply.

TABLE 13.—*Sanitary conveniences of dwelling, by source of water supply.*

Sanitary conveniences of dwelling.	Children 2 to 7 years of age.						
	Total.		Water supply.				
			City.		Well or cistern.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	4,498	100.0	1,496	100.0	21
Sink, water-closet, and bath	2,205	36.7	2,195	48.8	10	.7	.....
Sink and water-closet	1,655	27.5	1,644	36.5	11	.7	.....
Sink and bath	9	.1	4	.1	5	.3	.....
Water-closet and bath	22	.4	22	.5	.....	.....	.....
Sink only	768	12.8	421	9.4	347	23.2	.....
Water-closet only	82	1.4	72	1.6	8	.5	2
No conveniences	1,252	20.8	138	3.1	1,114	74.5	.....
Not reported	22	.4	2	(2)	1	.1	19

[1] Per cent distribution not shown where base is less than 100. [2] Less than one-tenth of 1 pe cent.

The proportion of children of native white mothers living in homes with sanitary conveniences was consistently higher than that of children of mothers born outside the United States or of colored mothers. Of children of native white mothers, 84 per cent lived in homes supplied with city water; 71 per cent of those of foreign-born mothers, and 69 per cent of those of colored mothers lived in such homes. The homes of 78 per cent of the children of native white, 61 per cent of those of foreign born, and 55 per cent of those of colored mothers had flush toilets. Even more marked was the superiority of the homes of children of native white mothers as regards equipment with bathtubs; 69 per cent of them were so equipped, in comparison with 23 per cent of the homes of children of foreign-born parents and 18 per cent of the homes of children of colored parentage. (General Table VII, p. 146.)

In considering toilet provision the rural, sparsely settled nature of a considerable portion of Gary needs to be borne in mind. The extreme undesirability of the dry yard privy is most evident in the more closely built districts. In the South Side 927 children of preschool age—32 per cent of the entire number in the district—were dependent upon yard privies; all the 40 children of preschool age in Clark, 77 per cent of those in Tolleston, 67 per cent of those in Ridge Road and Glen Park, and 65 per cent of those in Lincoln Park had no better toilet accommodations than yard privies. Only in the South Side and Tolleston were yard privies found to be the sole toilet provision for a group of three or more families containing children 2 to 7 years of age.

Somewhat over half the children (52 per cent) were in homes which had flush closets within the dwelling; 14 per cent had water-closets outside the dwelling—in hall, on porch, or in cellar or yard. (General Table VIII, p. 147.)

A toilet within the apartment, for use by a single family, is increasingly recognized as a reasonable standard for city dwellers. Building codes are beginning to measure up to this. Realization of the physical discomforts and the moral danger attaching to inadequate toilet provision which tends to promiscuous use of water-closets and privies by large numbers of people, is growing. The State law in Indiana already referred to requires within each apartment in every tenement house erected after 1913 a separate indoor toilet, and for every tenement house existing prior to the act of 1913 at least one water-closet for every two families.[5] "Under no circumstances shall the general water-closet accommodations of any tenement house be permitted in the cellar or basement thereof."[6]

[5] Housing Law of the State of Indiana, Acts of 1913, secs. 34 and 62.
[6] Ibid., sec. 61.

TABLE 14.—*Location and type of toilet, by number of families using.*

Location and type of toilet.	Children 2 to 7 years of age.										
	Total.		Number of families using toilet.								
			1		2		3		4 and over.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	4,782	100.0	910	100.0	176	100.0	111	100.0	36
Water-closet	3,964	65.9	3,264	68.3	534	58.7	91	51.7	66	59.5	9
In dwelling	3,141	52.2	3,015	63.0	120	13.2	4	2.3	2	1.8	.....
Outside dwelling	821	13.6	249	5.2	412	45.3	87	49.5	64	57.6	9
Location not reported	2	.....	.....	.....	2	.2	.....	.....	.....	.....	.....
Yard privy	2,032	33.8	1,518	31.7	376	41.3	85	48.3	45	40.5	8
Type not reported	19	.3	.....	.....	.....	.....	.....	.....	.....	.....	19

[1] Per cent distribution not shown where base is less than 100.

Half the children of preschool age were living in homes which had a private water-closet within the dwelling (Table 14); the homes of 4 per cent more had a water-closet used by but one family, though located outside the dwelling; one-fourth lived in homes which had an individual yard privy. That is, four-fifths of all the children were in families which did not share a toilet with another family.

The families of 9 per cent of the children shared the use of a water-closet with one other family, and 6 per cent had a yard privy in common with another family. The families of 287 children, 5 per cent of the total, shared either water-closet or yard privy with two or more families. All these children, except the 23 who lived in the First Subdivision, resided in the South Side and Tolleston. (General Table VIII, pp. 147, 148.)

Approximately nine-tenths of the children with native white mothers, three-fourths of those with mothers of foreign birth, and three-fifths of those with colored mothers, lived in families with one toilet per family. Children in families using a toilet with at least two other families comprised 2 per cent of all preschool children with native white mothers, 6 per cent of those with foreign-born mothers, and 14 per cent of those with colored mothers. (General Table IX, p. 149.)

Overcrowding within the home.—The four-room dwelling has already been referred to as the type most commonly occupied in Gary by the families of children of preschool age. Very few children (less than 1 per cent) were living in one-room apartments; but 8 per cent lived in two rooms; slightly less than one-fourth lived in dwellings of three rooms or less. The South Side, with almost twice as many children 2 to 7 years of age as any other district, had the smallest

proportion (18 per cent) housed in dwellings of five rooms or more; in the First Subdivision 68 per cent of the children of preschool age lived in dwellings of at least five rooms; in Ambridge, 58 per cent. (General Table X, p. 150.)

TABLE 15.—*Number of persons in household.*

Number of persons in household.	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
2	6	0.1
3	339	5.6
4	926	15.4
5	1,319	21.9
6	1,193	19.8
7	906	15.1
8 and over	1,303	21.7
Not reported	23	0.4

Two-thirds of all the families containing children included in the study numbered four to six members.[7] It was not unusual for a household to contain other persons in addition to the immediate family. Table 15 includes under persons in the household not only the parents and brothers and sisters of preschool children but other people who were living in the home. But a trifle more than one-twentieth of all the children were in households of less than four; somewhat over seven-tenths were in those totaling four to seven members; and slightly more than one-fifth in households of eight or more persons. The South Side and Tolleston led other districts[a] in the percentage of children living in households of eight or more members. A crude measure of overcrowding within a dwelling is afforded by the average number of persons per room. This measure ignores the variability in size of rooms, but is not without value. Almost three-fourths of the 6,015 children were living in households where the number of persons was less than double the number of rooms in the dwelling. One-fourth were in households overcrowded on the standard of two or more persons per room; one-twentieth were in homes which had an average of three or more persons per room. (Table 16.)

[7] See p. 12.

[a] Clark and Lincoln Park not included on account of small numbers.

TABLE 16.—*Average number of persons in household per room, by color and nativity of mother.*

Average number of persons in household per room.	Children 2 to 7 years of age.								
	Total.		Color and nativity of mother.						
			Native white.		Foreign-born white.		Negro.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	1,843	100.0	3,934	100.0	232	100.0	6
Less than 1	894	14.9	636	34.5	233	5.9	20	8.6	5
1, less than 1½	2,103	35.0	834	45.3	1,178	29.9	90	38.8	1
1½, less than 2	1,465	24.4	229	12.4	1,174	29.8	62	26.7	.....
2, less than 3	1,250	20.8	103	5.6	1,100	28.0	47	20.3	.....
3 and over	278	4.6	30	1.6	236	6.0	12	5.2	.....
Not reported	25	0.4	11	0.6	13	0.3	1	0.4	.....

[1] Per cent distribution not shown where base is less than 100.

The homes of children of mothers of foreign birth were more crowded than those of children of colored or of native white mothers, the difference being most marked between children of foreign-born mothers and those of native white mothers. Of all the children with mothers born outside the United States, 34 per cent lived in households which had two or more persons for every room, as compared with 26 per cent of the children of colored mothers and 7 per cent of the children whose mothers were native white. Conversely, the proportion of children of native white mothers in homes with fewer persons than rooms in the household was more than five times as large as the corresponding proportion among children with mothers of foreign birth. Besides the somewhat larger size of families among the foreign born (Table 1, p. 8.) there was an increased tendency on their part to keep lodgers. The proportion of colored families keeping lodgers was also high.

ECONOMIC CONDITIONS.

The standard of living attainable by a family depends first of all upon the amount and adequacy of family income. Some incomes must be considered inadequate to supply family needs, no matter what intelligence, skill, and appreciation of values be presupposed in their expenditure.

In the normal family the chief financial responsibility ordinarily falls upon the father; in families in which the father is dead, has deserted, or is absent for other cause, another member usually assumes the main burden of supporting the children. In this study, the person with the heaviest financial responsibility for the family group, whether the father or some other member of the household,[8] has been designated chief breadwinner, and the chief breadwinner's annual earnings have been considered the best obtainable gauge of the family's economic status. Other income would be likely to be a less significant indication because often made up of contributions less regular and more temporary in nature than the chief breadwinner's earnings. Supplementary income from investments would commonly be found to accompany the chief breadwinner's earnings which were in themselves equal to family needs and therefore a satisfactory index to the family's standard of living. Mothers in Gary who were employed, for the most part kept lodgers, and their earnings could not be itemized with accuracy but merely represented gross receipts. The employment of the mother outside the home involved lessening the time and service which she could give to home and children, and might on this account be expected to yield less real benefit to the family than the sum total of her monetary addition to the family income would suggest.

In the homes of 57 per cent of the 6,015 children of preschool age in Gary, the chief breadwinner's earnings were the only income. The larger the chief breadwinners' earnings, the smaller the proportion of cases in which they were supplemented by income from other sources. Although the lowest earnings group based on aggregate earnings was smaller and the highest earnings group somewhat larger than the corresponding group based on the chief breadwinner's earnings alone, the differences were not excessive and were due chiefly to inclusion of the mother's earnings from lodgers; hence, they were not especially significant of improved economic status. (General Table XI, p. 151.)

[8] In the tabulations the mother was never classified as chief breadwinner, and if no person other than the mother assumed financial responsibility for the family it was considered as having no chief breadwinner. General Table XVI, p. 154. shows the proportion of mothers in each group who were gainfully employed and the amount they contributed to the support of the family.

The chief breadwinner's earnings were ascertained for the last calendar year (1917) completed prior to the time this study was made. This period was chosen instead of the exact 12 months immediately antedating the visit of the Children's Bureau agent to the family because it was believed mothers and fathers would be better able to recall the amount of earnings from January to December than for any other 12-month interval. The figures which they had worked out, or which had been furnished them by their employers, for their income-tax statements for the calendar year 1917, were fresh in the minds of many of the parents. The statements which the employers had prepared for this purpose, in fact, were in many cases shown to the Children's Bureau agents by the parents.

Identity of chief breadwinner.

Of all the children of preschool age, 94 per cent were living in normal families—that is, families lacking neither father nor mother. In the families of 95 per cent of the children the father was the chief breadwinner. The fathers of 279 children (5 per cent) had died or had deserted their families, in 230 cases prior to 1917 and in 49 cases during that year. (Table 17.)

TABLE 17.—*Identity of chief breadwinner, by his annual earnings in 1917.*

Annual earnings of chief breadwinner in 1917.	Children 2 to 7 years of age.											
	Total.	Identity of chief breadwinner.										
		Father.		Other.						Not reported.		
				Father died 1917.		Father deserted 1917.		Father died or deserted before 1917.				
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	5,734	95.3	27	0.4	22	0.4	230	3.8	2	(1)
Under $1,050	1,774	1,708	96.3	11	.6	6	.3	49	2.8	.....	.....
$1,050 to $1,849	2,949	2,872	97.4	4	.1	3	.1	68	2.3	2	0.1
$1,850 and over	819	794	96.9	2	.2	1	.1	22	2.7	.....	.....
No chief breadwinner and no earnings	129	56	43.4	.....	.....	.....	.....	73	56.6	.....	.....
Not reported	344	304	88.4	10	2.9	12	3.5	18	5.2	.....	.....

[1] Less than one-tenth of 1 per cent.

Annual earnings of chief breadwinner.

Chief breadwinners in 14 per cent of the families earned less than $850 a year; the chief breadwinners of 28 per cent of the families, less than $1,050 per annum. Almost three-fifths of the chief breadwinners (59 per cent) made less than $1,450 in a twelvemonth. Eighteen per cent had earnings reaching $1,450 but falling below $1,850 a year, while 15 per cent reached or exceeded $1,850.

TABLE 18—*Annual earnings of chief breadwinner in 1917.*

Annual earnings of chief breadwinner in 1917.	Families with children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	3,991	100.0
Under $850	544	13.6
$850 to $1,049	577	14.5
$1,050 to $1,249	696	17.4
$1,250 to $1,449	540	13.5
$1,450 to $1,849	723	18.1
$1,850 to $2,249	269	6.7
$2,250 and over	317	7.9
No chief breadwinner and no earnings	93	2.3
Not reported	232	5.8

Table 19 shows the size of the families of chief breadwinners earning specified amounts in 1917. The family with four members was the most frequent. Eleven per cent of these families of four had breadwinners earning less than $850 a year; 17 per cent had chief breadwinners receiving at least $1,850. Annual earnings less than $850 were in 1917 unquestionably insufficient for the physical needs of families with as many as four members.

In 1,148 families, 29 per cent of the total, the earnings of the chief breadwinner averaged less than $200 per person per year; and in 145 families (4 per cent) the average per person was less than $100 a year. It must be borne in mind that most of the families were of normal composition, and therefore included at least two adults, the father and the mother. Thus in one-third of the families the chief breadwinners' earnings were seriously beneath the amount necessary for the maintenance of even the simplest, plainest family life consistent with health and decency.

TABLE 19.—*Number of persons in family, by annual earnings of chief breadwinner in 1917.*

Number of persons in family.	Families with children 2 to 7 years of age.									
	Total.	Annual earnings of chief breadwinner in 1917.								
		Under $850.	$850 to $1,049.	$1,050 to $1,249.	$1,250 to $1,449.	$1,450 to $1,849.	$1,850 to $2,249.	$2,250 and over.	No chief breadwinner and no earnings.	Not reported.
Total	3,991	544	577	696	540	723	269	317	93	232
1	36	7	4	4	1	1	2	3	2	12
2	55	8	4	6	2	8	3	2	15	7
3	575	48	54	81	82	140	59	58	19	34
4	1,049	114	135	182	159	215	78	96	18	52
5	954	148	146	165	125	167	64	85	18	36
6	627	110	114	100	86	100	30	32	9	46
7	351	53	66	80	47	41	16	17	8	23
8	193	27	35	41	27	24	8	17	2	12
9	89	21	11	21	4	13	7	4	2	6
10	26	2	4	8	4	4	.....	2	.....	2
11	15	6	1	3	2	3	.....	.....	.....	.....
12 and over	6	.....	2	3	1	.....	.....	.....	.....	.....
Not reported	15	.....	1	2	.....	7	2	1	.....	2

Nativity and earnings.

While but 7 per cent of the children whose mothers were native white had chief breadwinners whose annual earnings failed to reach $850, 17 per cent of the children whose mothers were of foreign birth, and 24 per cent of those with colored mothers, were in families in which the chief breadwinner's earnings fell below $850. In the homes of one-half of the colored children the chief breadwinners did not make $1,050 a year. Somewhat more than one-fourth of the children of native white mothers, less than one-twelfth of those whose mothers were born outside the United States, and barely 2 per cent of the children with colored parents, belonged in homes in which the chief breadwinner's earnings equaled or exceeded $1,850 per annum. (General Table XII, p. 151.) Because of the greater earnings of the chief breadwinners in the native white families, their earnings were least often supplemented by earnings of other members of the family; conversely, earnings of chief breadwinners for colored children were most frequently added to by the efforts of other members of the family. (General Table XI, p. 151.) Judged on the bases of chief breadwinners' annual earnings and their adequacy, economic conditions were better in the homes of children whose mothers were native white than in the homes of those whose mothers were foreign born or colored.

Effect of literacy and ability to speak English upon earnings.

Illiteracy and, in an English-speaking country, inability to speak English, may affect earning capacity as well as limit the kind of occupation which may be undertaken. Both these factors would have less potency in a year like 1917 when the demand for labor was great. Nevertheless, illiteracy and inability to speak English were apparently more largely associated with lower annual earnings than with higher in the homes containing children 2 to 7 years of age. In the earnings group below $1,050 per annum, close to one-fourth of the children had fathers incapable of reading or writing in any language; one-fifth had fathers unable to speak English. Among the families with chief breadwinners earning $1,850 or more per year, the fathers of only 2 per cent of the children were illiterate, and of only 1 per cent, unable to speak English.[9]

Employment of chief breadwinner.

In a city which had its inception as a place to house employees of the steel industry, wage earners employed in this industry would be expected to bulk large in the working population. No other industry at all comparable to steel in size and importance had risen in Gary. Yet because the municipality had been healthy in de-

[9] Fathers and chief breadwinners, it must be remembered, were identical in 95 per cent of all cases.

velopment, there existed within it no inconsiderable number of wage earners not directly concerned with the manufacture of steel or steel products, and a class made up of professional men and women, employers, and people working for their own profit at their own risk. No distinction has been made here between wages and salaries, but classification has been purely with reference to whether the breadwinner was employer, employee, or working independently on his own account; i. e., briefly, into wage earners and nonwage earners. Of the 6,015 children of preschool age, 86 per cent were in families whose chief breadwinners worked for wages; in the families of 61 per cent the chief breadwinners were employees in the steel industry, and in 25 per cent, in other industries. One-eighth of the children had breadwinners who were nonwage earning workers. (Table 20.)

TABLE 20.—*Type of employment of chief breadwinner, by annual earnings in 1917.*

Type of employment of chief breadwinner.	Children 2 to 7 years of age.											
	Total.		Annual earnings of chief breadwinner in 1917.									
			Under $1,050.		$1,050 to $1,849		$1,850 and over.		No chief breadwinner and no earnings.		Not reported.	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total	6,015	100.0	1,774	100.0	2,949	100.0	819	100.0	129	100.0	344	100.0
Wage earners	5,141	85.5	1,651	93.1	2,727	92.5	580	70.8	1	.8	182	52.9
Steel industry	3,654	60.7	1,107	62.4	1,982	67.2	462	56.4	.....	.....	103	29.9
Other industry	1,478	24.6	539	30.4	743	25.2	118	14.4	1	.8	77	22.4
Not reported	9	.1	5	.3	2	.1	.....	.....	.....	.....	2	.6
Nonwage earners	756	12.6	121	6.8	222	7.5	239	29.2	29	22.5	145	42.2
Employers	512	8.5	58	3.3	142	4.8	194	23.7	23	17.8	95	27.6
Not employers	244	4.1	63	3.6	80	2.7	45	5.5	6	4.7	50	14.5
Not reported	118	2.0	2	.1	.....	.....	.....	.....	99	76.7	17	4.9

In each earnings group wage earners formed the largest proportion of chief breadwinners. As incomes from the chief breadwinners' efforts increased, however, the proportion of nonwage earners became greater. Sixteen per cent of the children with nonwage earning breadwinners and 32 per cent of those whose breadwinners worked for wages were in homes in which the chief breadwinners' earnings failed to reach $1,050; 32 per cent of those in nonwage earners' families, and 11 per cent in wage earners' families, were in homes in which the chief breadwinner earned at least $1,850 in a twelvemonth.

Among wage earners, earnings tended to average slightly higher for employees in steel than for employees in other industries. Little

significance can be attached to this tendency, however, because information as to such conditioning factors as hours and wages is wanting.

Nonemployment of chief breadwinner.[10]

The bearing which nonemployment of the chief breadwinner of a family has upon family welfare is obvious. If this important source of income were cut off for a long period, most families would be forced speedily to extreme expedients to maintain that standard of home life to which they were accustomed. In work for social betterment and economic improvement, reduction of nonemployment is admittedly important. In 1917, because of war and the consequent diversion of a portion of the labor supply to the Army and Navy, nonemployment from certain causes usually operative might be expected to be small, and total nonemployment, therefore, less than in normal times of peace.

Chief breadwinners for 38 per cent of all the children 2 to 7 years of age were reported to have experienced no nonemployment in the year in question; breadwinners for an additional 24 per cent were nonemployed less than 1 month. Forty-two per cent of all the children had breadwinners nonemployed less than 3 months; 7 per cent, 3 but under 6 months; about 3 per cent, 6 to 12 months. The extent of nonemployment was greater among wage earners than among those not working for wages. Two-thirds of the children of wage earners, but somewhat less than one-fourth of those of nonwage earners, had chief breadwinners who were nonemployed for some period during the year.

Why wage earners were nonemployed at any time during 1917 was variously explained by mothers and fathers. Where several causes contributed to the total time lost from work, that cause has been considered major and representative which accounted for the greatest fraction of the time lost.

Illness of self or of some member of the family was the major cause of nonemployment most often reported. Well over one-fourth (28 per cent) of the children of wage earners had breadwinners whose chief cause of loss of time from work was illness. Almost one-tenth (9 per cent) had chief breadwinners whose major cause of absence from work lay not in themselves but in the industry which employed them. Six per cent had chief breadwinners whose leading cause of unemployment was lack of a job. Two per cent had breadwinners whose main reason for absence from work was an injury or accident. Only two-tenths of 1 per cent had breadwinners who lost more time

[10] Since the purpose of this classification is to show the length of time during which the family received no income from the chief breadwinner, nonemployment includes cases in which the income failed because of the death or desertion of the chief breadwinner during the year, as well as those in which the chief breadwinner was unemployed or sick. See General Table XIII, p. 152.

because of strike or lockout than from any other cause. Shutdown, no job, and strike or lockout each probably played in 1917 a less important role among the reasons for nonemployment than they would have played customarily in times of peace. Major causes of absence from work had practically the same order of precedence among wage earners in steel and wage earners in other industries. Shutdown, however, was a relatively much more important cause in the steel industry than in other industries. Sickness, too, seemed to bulk somewhat larger among steel employees. (General Table XIII, p. 152.)

The chief breadwinners of the families of 2,283 children of preschool age lost no pay through nonemployment. The effect of nonemployment upon earnings may be gauged in a measure by the distribution in earnings groups when nonemployment was nil and when it was present. In homes with less than $1,050 as the chief breadwinner's annual earnings were 16 per cent of the children whose breadwinners suffered no period of nonemployment, and 40 per cent of the children whose chief breadwinners were nonemployed at some time during the year. In the group earning $1,050 to $1,849 a year, the respective percentages were 53 and 49; in the highest earnings class ($1,850 or over per annum), they were 23 and 8. Even in an exceptional industrial year like 1917, nonemployment was an important factor in the economic well-being of wage earning men and their families. (Table 21.)

TABLE 21.—*Annual earnings of chief breadwinner, by nonemployment of chief breadwinner in 1917.*

Annual earnings of chief breadwinner in 1917.	Children 2 to 7 years of age.								
	Total.		Nonemployment of chief breadwinner.						No chief breadwinner.
			None.		Some.		Not reported.		
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	2,283	100.0	3,105	100.0	555	100.0	72
Under $1,050	1,774	29.5	364	15.9	1,235	39.8	175	31.5	.....
$1,050 to $1,849	2,949	49.0	1,213	53.1	1,511	48.7	225	40.5	.....
$1,850 and over	819	13.6	531	23.3	243	7.8	45	8.1	.....
No chief breadwinner and no earnings	129	2.1	20	0.9	33	1.1	4	0.7	72
Not reported	344	5.7	155	6.8	83	2.7	106	19.1	.....

Gainful employment of mother.

Slightly over three-tenths of all the mothers had never been employed away from home either before or after marriage. Among Italian mothers the proportion (seven-tenths) who had never done outside work was much higher; among German mothers (one-eighth)

much lower. Less than one-fifth of all the mothers had ever been engaged in factory work.

Native white mothers had begun work away from home at a later age than foreign-born or colored mothers. Of the native white mothers, only about 1 in 13 had started work away from home before attaining the age of 14 years; among foreign-born women, on the contrary, 1 in 7, and among colored mothers 1 in 6, began work before reaching the age of 14. (General Table XIV, p. 153.)

In 1917, mothers in somewhat over three-fifths of the families containing children 2 to 7 years of age were not gainfully employed either within their homes or outside. The proportion was more nearly seven-tenths among native white mothers, while it was a little under one-half among colored mothers, and three-fifths among the foreign born. (General Table XV, p. 153.)

Table 22 shows whether the occupations of gainfully employed mothers took them outside the home or not. Mothers of 29 per cent of all the children kept lodgers; mothers of 4 per cent did some other type of gainful work at home; mothers of 5 per cent did work which took them outside the home. Thus neither outside work nor gainful work at home other than keeping lodgers was of great importance in its effect on the home life of the 6,015 children of preschool age. The chief industry of Gary was not one which offered many married women opportunities for work. Keeping lodgers, however, was an occupation of fairly common occurrence. This sometimes meant merely taking a roomer for part or all of the year. More often it entailed, especially among the foreign born, furnishing both room and board, or at least room and the mother's services as cook or laundress.

When visited in 1918, 30 per cent of the children with foreign-born mothers, 25 per cent of those with colored mothers, and 18 per cent of those whose mothers were native white were living in homes where lodgers were kept. Keeping lodgers was most prevalent among Lithuanian and Italian mothers.

TABLE 22.—*Mother's gainful occupation in 1917.*

Mother's gainful occupation in 1917.	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
No employment	3,757	62.5
No lodgers	513	8.5
Other gainful home work	218	3.6
Outside work	295	4.9
Lodgers	1,730	28.8
No other gainful work	1,705	28.4
Other gainful work at home or outside	25	.4
Not reported	15	.2

Mother's earnings.

Mothers' earnings were not very large; more often than not they totaled less than $200 for the entire year. And inasmuch as these earnings were more often from keeping lodgers than from other occupations, it was impossible to state them except in the form of gross receipts. Earnings above expenditures incidental to furnishing room and board could not be ascertained.

With increase in the amount which chief breadwinners earned went a slight decrease in the number of mothers working for gain. The proportion of mothers gainfully employed was highest when there was no chief breadwinner in the family and consequently no income from his earnings. (General Table XVI, p. 154.)

Separation of mother and child on account of mother's employment.

One child in 13 had at some time during his life been separated from his mother because of her employment.[a] Of the 471 children whose mothers at some time had had to leave them to go to work, 55 per cent were cared for at home, sometimes by an older child but more often by an adult in the household. A few children (13 per cent) were cared for in institutions, mainly day nurseries; approximately three-tenths were left in charge of an adult caretaker outside their own home. (General Table XVII, p. 156.)

If the annual earnings of the chief breadwinner for 1917 be considered as representative of the relative economic status of the families, not only in 1917 but for the longer period covered by the lives of the children born during the period from 1911 to 1915, further evidence may be shown that lower earnings of the chief breadwinner were accompanied by increased likelihood of the gainful employment of the mother. Of the children whose breadwinners earned less than $1,050, 89 per cent had never been apart from their mothers because employment took the mother away from home; when chief breadwinner's earnings were as much as $1,850 per annum, 98 per cent of the children had never been separated from their mothers. Separation of mother and child was most prevalent in those families in which there were no earnings and no chief breadwinner. (General Table XVIII, p. 157.)

Colored mothers more often than native white or foreign born had to leave their children to go to work. It will be recalled that earnings of chief breadwinners were lower among the colored families than among others, and that colored mothers were more likely to be gainfully employed than native white or foreign-born mothers.

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[a] This classification includes those separated only during the mothers' working hours and those away from their mothers both day and night.

Household help.

Other conditions being similar, it ordinarily holds that the more ample the family income the greater the chance that some part of it may be apportioned to providing the mother with assistance in some of her household tasks. When the household contains many members, the older children or some adult who is not employed outside the home may help the mother. Three-fifths of the children of preschool age were living in homes where the mother had no help in the performance of daily household tasks. The proportion of mothers who received no help was largest among the foreign born and smallest among the native white. Only 2 per cent of the children whose mothers were foreign born lived in homes where the mothers had full-time hired help with housework, as compared with 7 per cent among the children of native white mothers. Of all the children included in the study, one-fifth were in homes in which the mother had some paid assistance. The more frequent utilization of paid help among native white mothers than among foreign-born or colored mothers is partly explained by difference in racial custom, but it is also partly due to the difference in the earnings of the chief breadwinner. When these earnings were less than $1,050, the mothers of only 8 per cent of the children had any hired help; when they were at least $1,850, the mothers of 51 per cent of the children had hired assistance. The proportion of children whose mothers had no help, either hired or free, was practically twice as large when the chief breadwinners earned less than $1,050 per annum as it was when the chief breadwinners' earnings were $1,850 or more. (General Table XIX, p. 158.)

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CHILD CARE AND HYGIENE.

Within the past few years guiding principles in child care and hygiene have been given much clearer formulation and received much wider dissemination than even a decade ago. Knowledge and recognition of the essential requirements of a young child with reference to nutrition, protection from heat or cold, sleep and rest, exercise and fresh air, have increased. Moreover, expression has recently been given to minimum standards below which a community should not fall if it is to give proper care to its children.[11]

Certain items present themselves as essential in considering what favors the healthy growth of the child of preschool age and what a program of care for such a child should embody. If his needs as a growing organism are to be met satisfactorily it is perhaps of foremost importance that he be provided with suitable meals at regular hours daily. It is well, too, that milk have a place in his diet and that his evening meal be not so heavy as to tax his digestive powers unduly and interfere with his sleep. He needs plenty of rest at night. Regular hours for retiring and rising, and the use of a separate bed in a room with an open window, and of night clothes other than the garments he wears by day, tend to insure sleep of the proper amount and quality. At least a weekly bath the year round seems necessary to maintain healthful cleanliness.

These items of care—suitable meals, milk as part of the diet, a light evening meal, regular hours for eating, for retiring, for rising, 12 hours rest at night, a separate bed, a bedroom with window open winter and summer, night clothes not worn by day, and a weekly bath—are not all of equal importance to the well-being of a child 2 to 7 years of age. Together, it is likely that they present a program too exacting to be practical. It may be conceded that children undoubtedly do thrive in the absence of some of them. Considered from the standpoint of the ideal, however, it is questionable whether any one of the items enumerated should be completely ignored or even modified seriously; and yet only 17 of the 6,015 children of preschool age studied received all of these items of care.

Baths.

Only 21 children, all of them with foreign-born mothers, failed to receive at least one bath a week in the summer time. In winter 361 children (6 per cent of the total) were not bathed as often as once a week. A third of the children with Italian mothers had no weekly

[11] Standards of Child Welfare, U. S. Children's Bureau Publication No. 60. Washington, 1919.

bath in winter, a proportion markedly above that in any other nationality group.

Need for more frequent bathing in summer was very generally recognized in practice. In winter, 61 per cent of all the children were bathed not more frequently than once a week; only 18 per cent were bathed but once a week in summer. The proportion with seven or more baths per week in winter was only 3 per cent; in summer it was 37 per cent. Children of foreign-born mothers were bathed less often than children of native white or of colored mothers whatever the season of the year. In this connection should be mentioned again the better facilities for cleanliness which the homes of the children of native white mothers possessed. These homes were superior to the homes of children with mothers born outside the United States in provision of all modern conveniences but especially in provision of bathtubs. Sixty-nine per cent of the children of native white mothers, as compared with 23 per cent of those of foreign-born mothers, lived in homes equipped with bathtubs. (General Tables XX, p. 159, and VII, p. 146.)

All mothers tended to bathe children 2, 3, and 4 years old more frequently than children who were 5, 6, and 7.

Time outdoors.

The infant is dependent upon his elders to a very much greater degree than is the child 2 to 7 years of age. Freedom which comes with ability to walk, to run, to act independently, makes it of prime importance that children of preschool age should be so housed that they can enjoy light, air, sunshine, and outdoor play.

Comment has already been made on Gary's regulation of building, its provision of parks, its municipal playground, its playgrounds in connection with the schools. The character of the housing in the city has also been discussed. (See pp. 16.) Much of the city was still rural in character in 1918, but congested sections were not altogether lacking. The acquisition of space for playgrounds had not yet become a problem of clearing areas preempted by buildings; the city's ambition to continue its program for small parks and playgrounds "until a playground or small park could be reached by practically every child in Gary without crossing the right of way of a railroad" [12] was not yet so difficult of accomplishment as it would have been in an older, more rigid community; it was neither so difficult nor so costly to attain as it would be later on when the city was more thickly settled.

With reference to the need for playgrounds and to the shortcomings of many industrial cities as environments for the rearing of children, in the United States as in Scotland "one argument is beyond con-

[12] Annual message of the mayor to the city council, 1919.

troversy; the streets are too dangerous for young children. It follows that special play places, indoor and outdoor, are primary factors in the promotion of child nurture. The play center * * * is an essential counteractive to the debased housing that has come to us through the too rapid concentration of people in ill-planned cities." [13]

Efforts were made to ascertain how many hours the children of preschool age were getting out of doors and where they played at the time this study was being carried on—the summer of 1918.[14] Yards, courts, passageways between houses, porches, streets, alleys, vacant lots, and open dunes as well as school and city playgrounds and parks were utilized for play purposes, as the accompanying illustrations show. An abundance of sand was available for sand piles.

TABLE 23.—*Time spent out of doors day preceding agent's visit, by color and nativity of mother.*

Color and nativity of mother.	Children 2 to 7 years of age.							
	Total.	Time out of doors on preceding day.						
		None.	Less than 1 hour.	1 hour, less than. 2.	2 hours, less than. 3.	3 hours, less than. 5.	5 hours and over.	Not reported.
Total	6,015	35	15	60	136	679	4,944	146
Native white	1,843	21	8	32	60	301	1,366	55
Foreign-born white	3,934	14	6	25	71	358	3,376	84
Negro	232	.....	1	3	4	19	198	7
Not reported	6	.....	.....	.....	1	1	4	.....

Thirty-five children had not had any time outdoors the day before the Children's Bureau agent visited them. Slightly over four-fifths of all the children, however, had spent at least five hours outside the house, and only about 1 child in 25 had had less than three hours outdoors the previous day. When the mother had no one to whose care the child could be intrusted while outdoors and was herself unable to leave her household tasks to watch over the child's play and unwilling to permit him to play unguarded, the time outdoors was necessarily limited. (Table 23.)

The advantage which the one-family house with yard holds over the multiple tenement or apartment building of many floors is perhaps most important in housing children 2 to 7 years of age. The preschool children in Gary were fortunate in that almost three times as many of them lived in one- or two-family houses, as in buildings sheltering three or more families.

[13] Carnegie United Kingdom Trust Report on the Physical Welfare of Mothers and Children, Scotland, Vol. III, p. 343. Edinburgh, 1917.

[14] The time spent outdoors by the child the day preceding the visit of the Children's Bureau agent was ascertained. If the child's illness or some other special cause had affected his manner of spending the preceding day the child was not included among those for whom time outdoors was reported.

PLATE XIII.—PLAYING IN THE SAND.

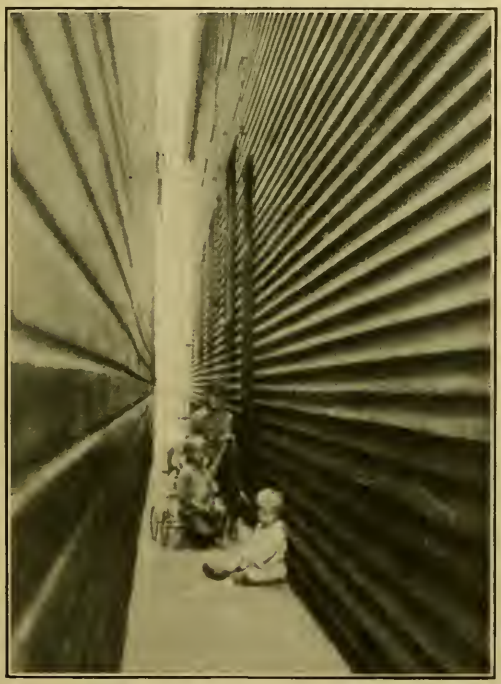


PLATE XIV.—PLAYING IN A PASSAGEWAY.

Sleep.

Estimates of the amount of sleep requisite for children 2 to 7 years of age vary. The child 2 or 3 years old probably should have more sleep than the boy or girl at the other extreme of this preschool age group. The child 2 to 7 years of age requires less sleep than does an infant, but a greater amount than that which suffices for an older child or an adult. Twelve hours' sleep out of the 24 is probably not too great an amount for children 2 to 7 years of age; 10 hours' night rest would assuredly not be excessive.[15]

In this study the time at which the child of preschool age went to bed the night before and the hour at which he arose upon the day when the Children's Bureau agent visited him were ascertained. If any unusual circumstance had affected the amount of time a child slept during the 24 hours preceding the agent's visit, so that it was not typical of his customary rest, the child was not included among those whose hours of night rest were reported. For all other children the hours between retiring and rising have been estimated and it has been assumed that they indicate the extent of night rest or sleep. The hours of actual sleep were probably somewhat less than the total so calculated, since no allowance is made in it for delay in falling asleep at night, for lying awake before rising in the morning, or for disturbed rest during the night.

Practically four-fifths of the children were not taking a daytime nap in March, 1918—62 per cent of those 2 or 3 years of age, 88 per cent of those 4 or 5 years of age, and 98 per cent of those 6 or 7 no longer slept during the daytime. For the greater proportion of the 6,015 children, then, night sleep was the only kind obtained.

Discussion of the amount of night rest has perhaps greatest significance with reference to the 4,767 children who were not accustomed to having a daytime nap. Of the 2- or 3-year-old children in this group 42 per cent slept less than 12 hours each night; two-thirds of those 4 or 5, and four-fifths of those 6 or 7 years old had less than 12 hours rest out of 24. About 1 child in 17 among those 2 and 3 years of age, 1 in 12 among those 4 or 5 years of age, and 1 in 7 among those 6 or 7 years of age, slept less than 10 hours a night and had no other sleep in a 24-hour period. In view of these figures it is a conservative estimate that at least 1 out of every 12 children of preschool age in Gary was not habitually securing the amount of sleep required for his best development. (General Table XXI, p. 160.)

Differences in habit between children with mothers of different races or nativity were not marked. Children of native white mothers

[15] Holt, L. Emmett, M. D.: Diseases of Infancy and Childhood, p. 6. New York, 1914. Doctor Holt advocates for a child 2 years of age 13 or 14 hours sleep to be taken 11 or 12 hours at night, and 1 or 2 hours in daytime nap. He believes a child 4 years of age requires 11 or 12 hours' sleep and holds it desirable that the daily nap be maintained until the child is 5 years of age. For a child 6 to 10 years of age he designates 10 or 11 hours of sleep as a fitting amount.

and of colored mothers were more likely to take a nap daily than were children of mothers born outside the United States. The proportion of children whose mothers were native white taking less than 10 hours' rest at night (10 per cent) was slightly less than the proportion among children with foreign-born mothers (12 per cent), and was considerably smaller than that among colored children (14 per cent). The proportion of children sleeping less than 12 hours at night varied very slightly according to race and nativity of the mothers. (General Table XXI, p. 160.)

Regularity of retiring and of rising.

Of all children of preschool age 62 per cent observed a regular hour for going to bed; 59 per cent had a regular time for rising.[16] From the standpoint of the child's welfare a regular hour for retiring was probably of greater importance than a set hour for getting up, since time and regularity of retiring in a measure condition the hour at which a child will awake naturally in the morning. Moreover, the commencing of household tasks is likely to affect the length of time which a child may be allowed to sleep in the morning, hence the need for him to go to bed early enough at night to admit of 10 or 12 hours' rest before the convenient time for him to arise.

Having a regular hour for retiring and for rising was slightly more common among the older children than among those 2, 3, or 4 years old.

TABLE 24.—*Hour and regularity of retiring, by age of child.*

Hour and regularity of retiring.	Children 2 to 7 years of age.														
	Total.		Age of child.												
			2 years, under 3.		3 years, under 4.		4 years, under 5.		5 years, under 6.		6 years, under 7.		7 years, under 8.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	1,079	100.0	1,437	100.0	1,233	100.0	1,100	100.0	1,008	100.0	156	100.0	2
No regular hour	2,162	35.9	414	38.4	534	37.2	436	35.4	374	34.0	354	35.1	50	32.1	....
Regular hour	3,704	61.6	635	58.9	869	60.5	764	62.0	696	63.3	635	63.0	103	66.0	2
Before 7	61	1.0	17	1.6	24	1.7	10	0.8	5	0.5	4	0.4	1	0.6	....
Between 7 and 8	517	8.6	123	11.4	143	10.0	98	7.9	96	8.7	47	4.7	10	6.4	....
Between 8 and 9	1,521	25.3	249	23.1	343	23.9	323	26.2	278	25.3	279	27.7	47	30.1	2
Between 9 and 10	1,319	21.9	193	17.9	293	20.4	268	21.7	271	24.6	256	25.4	38	24.4	....
10 and later	283	4.7	53	4.9	66	4.6	62	5.0	46	4.2	49	4.9	7	4.5	....
Not reported	3	(2)	....	....	....	....	3	0.2	....	....	....	....	....	....	....
Not reported whether regular hour	149	2.5	30	2.8	34	2.4	33	2.7	30	2.7	19	1.9	3	1.9	....

[1] Per cent distribution not shown where base is less than 100. [2] Less than one-tenth of 1 per cent.

Thirty-five per cent of the 6,015 children included in this study retired regularly before 9 o'clock each evening. About 1 child in 10

[16] In interpreting reports as to a child's habits, a variation in mealtime or in time of rising or retiring greater than one-half hour was considered as destroying regularity.

went to bed each night before 8 o'clock. Somewhat over one-fifth of the children stayed up until 9, and one-twentieth were in the habit of not going to bed until 10 or later. The age of the child affected scarcely at all the hour at which he was put to bed. Twenty-four per cent of the children 2 and 3 years of age, 28 per cent of those 4 and 5, and 30 per cent of those 6 or 7 years of age did not retire before the clock struck 9. (Table 24.)

Observing a regular hour for going to bed was most common among children of native white mothers. Of these children 80 per cent retired at a regular hour while but 63 per cent of the negro children and 53 per cent of those with foreign-born mothers went to bed at a stipulated time night after night. Among those with regularity of habit in this respect, 12 per cent of those with foreign-born mothers and 20 per cent of those with colored or with native white mothers were going to bed before 8 o'clock; 49 per cent of the children with mothers of foreign birth, 38 per cent of the colored children, and 36 per cent of the children whose mothers were native white were retiring at 9 or later. (General Table XXII, p. 162.)

Homes in which the chief breadwinner's annual earnings were most ample were most likely to observe regular hours for putting children of preschool age to bed. In families in which the annual earnings of the chief breadwinner fell below $1,050, 46 per cent of the children had no regular hour for going to bed; in homes in which the breadwinner earned at least $1,850 in a year, only 18 per cent of the children failed to observe set hours for retiring. Of the children whose chief breadwinners earned less than $1,050 a year, 69 per cent either had no regular hour for going to bed or else habitually retired at 9 or later; in families in which the breadwinner's earnings reached or exceeded $1,850 a year, only 47 per cent of the preschool children either had irregular hours or customarily retired after 9 o'clock. (General Table XXIII, p. 163.)

The regular time for going to bed that was most often reported was between 8 and 9 o'clock; the most usual regular time for rising was between 7 and 8 o'clock. (General Table XXIV, p. 164.) Only 1 child in 9 was in the habit of getting up before 7; 1 in 5 slept until 8 or later. Regularity of life in respect to hour of rising was greatest in homes with native white mothers. Three-fourths of the children with native white mothers and one-half of those with colored or foreign-born mothers had a regular hour for getting up. (General Table XXV, p. 165.) Life was more systematized, too, in regularity of rising for those children who belonged in homes wherein the chief breadwinner's earnings were greatest. Only 22 per cent of the children whose breadwinners earned at least $1,850 did not observe a regular hour for rising; 47 per cent of those whose breadwinners earned less than $1,050 had no regular hour.

Conditions of night rest.

The quality of sleep which a child gets will be affected not only by his physical condition and individual idiosyncrasies but also by his surroundings while asleep. The same number of hours in bed will yield greater rest and be of more value if the bed is clean, comfortable, and uncrowded; the bed and night clothing suitable and sufficient; the bedroom quiet, adequately ventilated, and not made the common sleeping place of too many persons diverse in their habits and sleep requirements.

Night clothing.—The use of suitable night clothing other than garments worn during the day is considered desirable hygienically. A little more than one-third of the children 2 to 7 years of age were, at the time of the study, sleeping in some of the clothes they wore by day; approximately two-thirds were using night clothes which formed no part of their daytime attire. Among children of Italian mothers these proportions were reversed. Children of Lithuanian mothers were also more likely to sleep in some part of their day clothing. Of the children of native white mothers 20 per cent, and of the colored children 13 per cent, used as night clothing part of their daytime apparel; 42 per cent of the children whose mothers were of foreign birth did so. (General Table XXVI, p. 166.)

Ventilation of bedroom.—The only means of judging whether a child was receiving fresh air at night was to ascertain the mother's custom as to keeping the windows of the child's bedroom open or shut. Children sleeping in rooms the windows of which were kept closed both winter and summer numbered 156 (3 per cent); 46 per cent occupied bedrooms the windows of which were opened only in summer; somewhat more than one-half (52 per cent) of the children had sleeping rooms with windows open the year round. Seventy-seven per cent of the children of native white mothers, 53 per cent of those of colored mothers, and 40 per cent of those with mothers born outside the United States occupied sleeping rooms in which the windows were opened every night whatever the season. Twenty-two per cent of the children with native white mothers, 41 per cent of the colored children, and 57 per cent of those whose mothers were foreign born slept in rooms with windows open in summer only. (Table 25.)

Bedroom windows were much more likely to be opened only in summer in homes where the breadwinner's annual earnings did not reach $1,050. Desire to conserve heat and warmth may partially explain this. When the breadwinner's earnings amounted to $1,850 or more, 77 per cent of the children slept in rooms with windows open both summer and winter, as contrasted with 38 per cent of the children whose breadwinners earned under $1,050 a year.

TABLE 25.—*Ventilation of bedroom, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.							
	Total.	Sleeping with bedroom windows open.						
		Summer and winter.		One season only.		Neither season.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	3,099	51.5	2,752	45.8	156	2.6	8	0.1
Native white	1,843	1,416	76.8	408	22.2	18	1.0	1	.1
Foreign-born white	3,934	1,555	39.5	2,248	57.2	124	3.2	7	.2
Polish	923	278	30.1	618	66.9	27	2.9	.....	.....
Serbo-Croatian	587	225	38.3	337	57.5	22	3.7	3	.5
Slovak	546	173	31.7	346	63.4	27	4.9	.....	.....
Magyar	291	117	40.2	161	55.3	13	4.5	.....	.....
Italian	265	103	38.9	156	58.9	6	2.3	.....	.....
German	228	131	57.5	92	40.4	4	1.8	1	.4
Lithuanian	225	68	30.2	147	65.3	10	4.4	.....	.....
All other	869	460	52.9	391	45.0	15	1.7	3	.3
Negro	232	122	52.6	96	41.4	14	6.0	.....	.....
Not reported	6	6	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

Number of occupants of child's bedroom.—Four per cent of the 6,015 children of preschool age in Gary occupied bedrooms alone; 24 per cent slept two in a room; 30 per cent had bedrooms accommodating three persons; 20 per cent slept four in a room; 13 per cent, five in a room, and 8 per cent, six or more in a room. (Table 26.)

Seven per cent of the children sharing a bedroom with four or more other persons were accustomed to having the bedroom windows open summer and winter; 13 per cent sleeping five or more in a room were used to having windows open in summer but closed in winter.

TABLE 26.—*Number of additional occupants of child's bedroom, by color and nativity of mother.*

Number of additional occupants of child's bedroom.	Children 2 to 7 years of age.								
	Total.		Color and nativity of mother.						
			Native white.		Foreign-born white.		Negro.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	1,843	100.0	3,934	100.0	232	100.0	6
None	261	4.3	151	8.2	91	2.3	15	6.5	4
1	1,415	23.5	617	33.5	728	18.5	69	29.7	1
2	1,800	29.9	617	33.5	1,096	27.9	86	37.1	1
3	1,232	20.5	295	16.0	903	23.0	34	14.7	.....
4	808	13.4	97	5.3	695	17.7	16	6.9	.....
5 and over	469	7.8	53	2.9	409	10.4	7	3.0	.....
Not reported	30	0.5	13	0.7	12	0.3	5	2.2	.....

[1] Per cent distribution not shown where base is less than 100.

The households in which mothers were foreign born, it will be recalled, were larger and more crowded than households with native white mothers. (See p. 29.) The bedrooms in which 28 per cent of the children with mothers of foreign birth slept were each occupied by five or more persons nightly; only 8 per cent of the children of native white mothers, and 10 per cent of the colored children, used bedrooms in common with so many occupants.

Bedrooms for children were more crowded in families where chief breadwinner's earnings were low. Practically half the children whose breadwinners earned less than $1,050 a year were sharing bedrooms with three or more other persons; 3 out of 10 were sleeping in the same room with four or more other people. In the homes where the chief breadwinner's earnings were $1,850 or more, 1 child in 5 had a room with three or more other persons, and 1 in 12 slept in a bedroom with four or more additional occupants. (Table 27.)

TABLE 27.—*Number of additional occupants of child's bedroom, by annual earnings of chief breadwinner in 1917.*

Number of additional occupants of child's bedroom.	Children 2 to 7 years of age.											
	Total.		Annual earnings of chief breadwinner in 1917.									
			Under $1,050.		$1,050 to $1,849.		$1,850 and over.		No chief breadwinner and no earnings.		Not reported.	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total	6,015	100.0	1,774	100.0	2,949	100.0	819	100.0	129	100.0	344	100.0
None	261	4.3	30	1.7	118	4.0	83	10.1	7	5.4	23	6.7
1	1,415	23.5	313	17.6	688	23.3	298	36.4	35	27.1	81	23.5
2	1,800	29.9	464	26.2	904	30.7	262	32.0	43	33.3	127	36.9
3	1,232	20.5	412	23.2	632	21.4	103	12.6	28	21.7	57	16.6
4	808	13.4	318	17.9	399	13.5	45	5.5	11	8.5	35	10.2
5 and over	469	7.8	228	12.9	197	6.7	22	2.7	4	3.1	18	5.2
Not reported	30	0.5	9	0.5	11	0.4	6	0.7	1	0.8	3	0.9

It was unusual for the children of preschool age to sleep in rooms with persons not members of the family. Thirty-five children, however (less than 1 per cent) were sharing bedrooms with such persons.

One child in 20 was getting less than 10 hours' rest at night in a bedroom with four or more occupants; three-tenths of all the children were sleeping less than 12 hours, in bedrooms accommodating four or more persons. That the child sleeping in a room with several other individuals tends not only to secure sleep less undisturbed in nature but also less sleep is indicated by the fact that but 8 per cent of the children occupying rooms alone slept less than 10 hours nightly,

whereas 15 per cent of those sharing sleeping quarters with five or more additional occupants had less than 10 hours' rest at night. (General Table XXVII, p. 167.)

The following examples are extreme, but they suggest how crowding the bedroom may affect the opportunity for a preschool child to obtain restful and sufficient sleep. A family of 10 lived in a three-room house. The father was dead. The oldest child was a girl 14, the youngest a 6-months-old baby. All 10 in the family slept in one bedroom. In one bed slept 4 brothers (2 of preschool age); in another 3 sisters (one 5 years old); a 20-months-old child had a bed to himself. The preschool children went to bed at irregular hours and usually had not more than 9 hours' sleep.

Another family of 10 lived in one room which had to serve all purposes. It was very large and was apparently intended as the basement and foundation for a house which when completed would afford plenty of space. Three sisters 14 years of age and over occupied a bed with one preschool girl; 2 brothers slept in another bed with a 4-year-old boy.

The sleeping needs and requirements of the individuals in these two family groups necessarily varied because of the range in age. In the second home the necessity of using the single room for every purpose of daily family life must have further imperiled the chance of the preschool child to sleep in surroundings restful and quiet.

Number of child's bedfellows.—As a rule, merely sharing a room with others offers less likelihood of disturbed sleep for the 2- to 7-year old child than sharing a bed. Twenty-three per cent of the children had separate beds; 45 per cent had one bedfellow; 27 per cent shared beds with two other persons; one child in 22 was sleeping with at least three additional individuals. Among children with native white mothers, the proportion sleeping alone (38 per cent) was double or more than double the corresponding proportions among colored children (19 per cent) and those with mothers of foreign birth (16 per cent). Among Slovaks and Poles only 1 child in 10 was sleeping alone. The bedfellows of the preschool children were most likely to be other children in the family, their brothers or sisters under 14 years of age. One child in 8, however, was sleeping with adults and children.[17] One in 5 was sleeping with adults only. Among children with native white mothers the proportion having both adult and child bedfellows was 5 per cent; among colored children it was 10 per cent; among children of foreign-born mothers, 16 per cent. (General Table XXVIII, p. 168.)

[17] The term "adult" has here been used to indicate a person 14 years of age or older.

TABLE 28.—*Number of hours' rest at night, by number of additional occupants of child's bed.*

Number of hours' rest at night.	Children 2 to 7 years of age.					
	Total.	Number of additional occupants of child's bed.				
		None.	1	2	3 and over.	Not reported.
Total	6,015	1,360	2,706	1,640	278	31
Less than 8	16	3	8	5	.....	.....
8, less than 9	93	23	38	30	2	.....
9, less than 10	589	98	254	192	45	.....
10, less than 11	1,669	353	807	449	59	1
11, less than 12	2,119	480	958	574	106	1
12, less than 13	1,103	286	484	277	55	1
13, less than 14	264	84	103	70	4	3
14 and over	60	18	26	15	1	.....
Not reported	102	15	28	28	6	25

Crowding the bed may reasonably be supposed to affect adversely both the quality and the amount of sleep which the occupants are likely to obtain. Nine per cent of the children of preschool age sleeping alone got less than 10 hours' night rest; 14 per cent of those with two, and 17 per cent of those with three or more bedfellows spent less than 10 hours in bed at night. Of the total number of children, 227 (4 per cent) slept less than 10 hours three in a bed, and 1,250 (21 per cent) slept less than 12 hours. Forty-seven children had beds with four or more occupants and slept less than 10 hours; 212 children had less than 12 hours' rest nightly in beds each containing four or more persons. (Table 28.)

Dental care.

"Two decades ago," wrote Terman in 1914, "the mouth of the school child was to the average educated person an unknown quantity. Even the dentist and physician were not aware of the actual conditions except by inference for the simple reason that only 5 or 10 per cent of the children ever came to them for examinations. It remained for the school doctor and school dentist to ascertain the real facts." [18] When once instituted, examinations of school children demonstrated that dental caries were very common among them. Investigation also revealed a great lack of care of children's teeth and showed that it was unusual for children to visit dentists. Dental defects and lack of care in children of preschool age received even tardier recognition. Need for paying any attention to temporary teeth and their condition is still far from being widely realized, though activities of the past few years, such as the modern health crusade, have helped greatly. Inaugurating toothbrush drills has not

[18] Terman, Lewis M.: The Hygiene of the School Child, p. 169. Houghton Mifflin Co. Boston, 1914.

only benefited school children but also reacted favorably upon the dental care of preschool children.

Eighty-eight per cent of the children of preschool age in Gary had never visited a dentist. Children of native white mothers were more likely to have been taken to dentists than children of foreign-born mothers or colored children. Of the children of native white mothers, about 1 in 5 had been to the dentist at least once; of those whose mothers were born outside the United States, about 1 in 11; of the children of colored mothers, about 1 in 21. The 1,164 children 6 or 7 years of age had had more opportunity than the others for being taken to a dentist; only 76 per cent of the children of these ages, as against 96 per cent of those 2 and 3 years of age and 85 per cent of those 4 and 5 years of age, had never been to a dentist. Of the 6- and 7-year-old children of native white mothers, only 62 per cent had had no dental attention.

Children who had visited a dentist only to have teeth extracted numbered 246 (4 per cent); 475 children (8 per cent) had gone to the dentist for other reasons. Seven per cent of all the children had made but one visit to a dentist; 120 children (approximately 2 per cent) had visited a dentist three times or more. (General Table XXIX, p. 169.)

In the families containing children of preschool age, more adequate chief breadwinner's earnings and an increased likelihood that the children would have received dental attention were coincident. When the chief breadwinner earned less than $1,050, 92 per cent, and when his earnings were $1,850 or more per annum, 78 per cent, of the children had never been taken to a dentist. Of the boys and girls 6 and 7 years of age whose breadwinner's earnings were most ample ($1,850 or over per year) only 58 per cent had not made at least one visit to a dentist. (General Table XXX, p. 170.)

PART II. DIET OF THE CHILDREN.

METHOD OF STUDY.

Securing diet records.

Owing to the extent and nature of the whole investigation, an exact quantitative study of the diet of each child for even a short period of time was entirely impracticable. However, because of the prime importance of diet in the normal growth and development of children, an effort was made to learn all that was possible by the schedule method concerning the feeding of these children of preschool age. The 6,015 diet records upon which this section of the report is based were secured, along with other information relating to the children, by experienced field agents in their visits to all the homes in Gary where a child born within the period 1911 to 1915, inclusive, was living. The mother was asked by the agent to state in detail the diet which the child had had on the day preceding the agent's visit. If the preceding day was Sunday, or if the diet for any reason was not the usual one, the record for another day was taken instead and a note to this effect entered on the schedule. Information was obtained concerning all food eaten by the children both at meals and between meals; the number, hours, and regularity of meals; and the total amount of milk used as a beverage. Agents were directed also to secure, when possible, estimates of the amounts of foods other than milk taken.

Limitations of material.

The material thus obtained has certain definite limitations incident to the method of securing the data. Chief among these are: (1) The diet is for a single day; (2) it is not quantitative to any great extent; and (3) its accuracy depends on the mother's memory. In respect to these obvious weaknesses the following points should be considered:

1. Although the diet was for but a single day and may have been either better or worse than the usual one, it was doubtless fairly typical for the majority of the children, since most families have moderately regular dietary habits. Further, every effort was made to exclude nontypical days. Feast days and fast days, and days when the children were sick or on special diets, were omitted. And even if certain of the diets are in some degree exceptional, when large numbers of one-day diets are considered—such as the 6,015 diets available for this report—the picture of the conditions found is

doubtless true in its main outlines. It is believed, therefore, that these diets are sufficiently representative of the customary ones of the children studied to yield valuable conclusions.

2. Without knowing the exact amounts of food eaten it is impossible to say whether the energy value of a diet is sufficient to cover a child's needs, and the value of the data here given is limited by this fact. But it is possible to determine much concerning the qualitative adequacy of a diet when, as in the present instance, information is available not only as to the kinds of foods eaten, but also covering the approximate amounts of milk and a rough indication of the amounts of other foods. In this study, diets qualitatively adequate were adjudged satisfactory on the assumption that normal amounts of food were eaten. The diets were thus rated too favorably rather than too unfavorably—a failing in the right direction in a study revealing uniformly poor conditions.

3. Although the mother's memory was trusted for the data, it was necessary for her to recall the diet of the preceding day only—not a difficult matter. Moreover, every effort was made by the agent to assist her to make the record complete and accurate. Special inquiries were made regarding certain foods, as, for instance, whether the bread had butter on it; what, if anything, was eaten on the potatoes; whether the child really had no milk or fruit; and what was eaten between meals. It is believed that by questioning the mother in regard to certain important foods, fairly complete statements as to the foods eaten by the children were obtained; and any slight omissions or inaccuracies in a few cases would not materially affect the findings of so large a number of cases.

These limitations should be borne in mind in considering the picture, drawn from the material contained in the 6,015 diet records, of how these preschool children of Gary were being fed.

Grading of diets.

Certain items of diet stood out prominently as deserving individual tabulation—as, the amount of milk used; the presence or absence of vegetables,[1] fruits, cereals, potatoes, and coffee or tea; the regularity and number of meals; the suitability of foods; the custom regarding eating between meals; the adequacy of breakfasts and lunches; and the prevalence of "heavy" night meals.

In order to facilitate the comparison of the diets with one another as well as with a fixed standard of adequacy and in order to relate diet to other factors in this study, it was necessary to formulate a system for classifying the diets into well-defined groups according

[1] According to the classification used in this study, "vegetables" indicates vegetables other than potatoes.

to degree of adequacy or inadequacy. A general survey of the diet material was made, and after consultations with pediatrists and specialists in nutrition a system of five grades was established. The specifications for the different grades and the relations of these grades to each other were as follows:

I. *Adequate* (A and B). This group includes all diets which would appear to cover amply all the child's bodily requirements—protein, mineral, vitamine, energy—regardless of the character of the diet.

The subdivision into A and B diets was made largely on the basis of the suitability of the diet in respect to regularity of meals, type of foods, distribution of meals, and similar items.

A. The standard for grade A represents the consensus of opinion among nutrition experts and physicians as to the diet to be recommended for children of preschool age. In such an ideal diet not only must all the elements required to nourish the body be present, but the food must be of such nature and given under such conditions as to be suited to the child's delicate and incompletely developed digestive tract. It will therefore consist largely of mild, bland foods simply cooked, and will contain no tea, coffee, rich pastries, or other unsuitable articles. The meals, furthermore, will be at moderately regular hours; there will be no promiscuous eating between meals, and the dinner or "heaviest" meal will be at noon.

The milk standard for Grade A was set at 1½ pints.

B. The diets classed as B appeared to contain all the elements required to nourish the child's body, but failed to measure up to the A standard in one or more particulars, usually in respect to items of suitability listed above. It was the general opinion of specialists that a diet with these flaws should be ruled out of the ideal group, but should not be barred from the adequate group. It is to be borne in mind, however, that if these faults are sufficiently serious the child may fail to be well nourished even though his diet includes the essential elements.

The milk standard for grade B was 1 pint.

II. *Questionable* (C). Any diet was classed as C which fell short of the requirements of an A or B diet in enough respects to make its safety extremely doubtful, but which had sufficient good points—usually 1 cup of milk—to make it superior to the definitely inadequate D diets.

III. *Inadequate* (D and E). All diets included in the inadequate group were unquestionably low in one or more of the food requirements.

D. A D diet was plainly lacking in essential elements, but had some redeeming features. It usually included less than one-half pint of milk or no milk.

E. The E diet represented an extreme degree of inadequacy, being so low in all food essentials as to be practically a deficiency diet. E diets were usually entirely lacking in milk, in all class A proteins, and in fruits, vegetables, butter, potatoes, and whole cereals.

Precautions taken in applying the grading system.

The chief difficulty in applying any system of classification lies in holding to the same standard throughout, and in having two or more persons use it with the same results. Every precaution was therefore taken to secure uniformity of classification. In the first place the specifications for each grade were defined as clearly as possible. The work of grading the diets was done by clerks with special training in dietetics. These clerks were given preliminary practice in applying the standards before beginning the actual grading of the schedules.

In order that nothing might be overlooked in judging a diet, a grading sheet was prepared and every diet was analyzed by this sheet. This was found to be of great assistance in clarifying judgment. In the preliminary practice period each clerk plotted a practice series of 100 diets on this sheet and assigned grades. They then compared the grades they had given. This practice was continued until their grading was so uniform as scarcely to differ one grade in several hundred records. After all diets had been tentatively graded, the two clerks went through the schedules together, made a second estimate of each diet grade, noted the one given previously, and agreed upon a final decision and recorded it. The uniformity of the two graders' work and the agreement in most instances of their final judgment with the first grades are considered evidence that the classification was done as consistently as could well be expected. Since the diets were always given the benefit of any doubt, the grades assigned tend to be higher rather than lower than they should be.

DISTRIBUTION OF CHILDREN IN THE DIET GRADES.

In analyzing the findings reported in Table 1 it should be kept in mind that the A diet is not one difficult of attainment. It is merely any diet capable of meeting the body's needs and administered with some consideration for the child's age and development. Moreover, such a diet need not be an expensive one—milk, whole cereal, and fruit or vegetable daily being sufficient to allow a diet to qualify in this group—and it is the easiest possible kind of diet to prepare. This being the case it might be expected that the large majority of the children would fall into the A diet group.

These facts notwithstanding, only 25 of the 6,015 children—less than half of 1 per cent of the total number—were thus fortunate. (Table 1.) Furthermore, the number classed as having B diets (probably adequate in food requirements though unsuitable in character and including but a pint of milk) was likewise small, amounting to 8.5 per cent of the whole group. Less than 10 per cent of the children studied, in other words, were receiving diets which appeared adequate to their needs. Almost three times this number (29.2 per cent) had diets (C) whose adequacy was highly questionable; and nearly two-thirds of the entire group (60.5 per cent) were found to have diets plainly incapable of covering all their bodily requirements, 58.4 per cent being in the D group and 2.1 per cent (5 times the percentage of A's) in the extremely inadequate E group. Chart I strikingly portrays this surprising distribution.

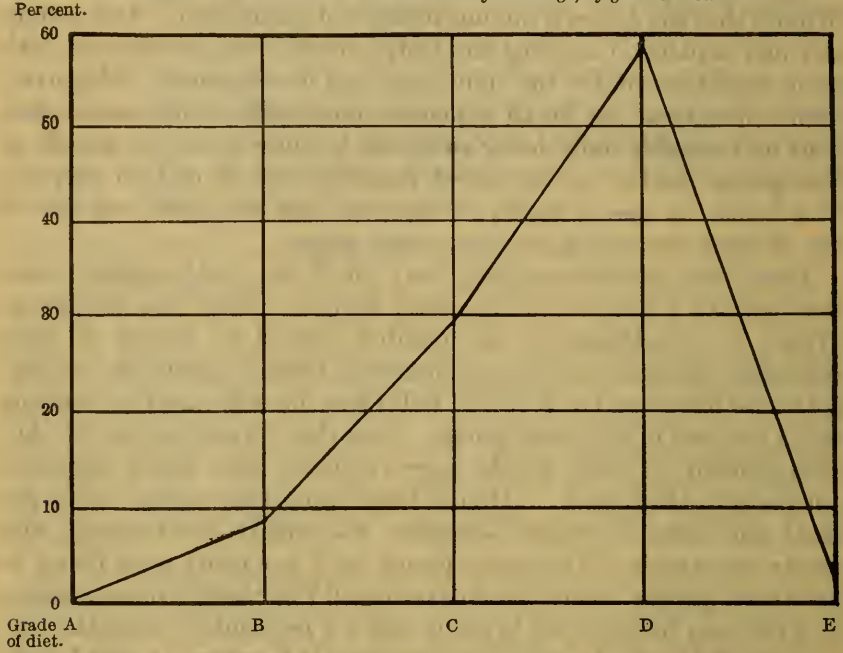
TABLE 1.—*Grade of diet.*

Grade of diet.	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
Adequate diet	534	8.9
A	25	.4
B	509	8.5
Questionable diet, C	1,757	29.2
Inadequate diet	3,639	60.5
D	3,514	58.4
E	125	2.1
Not reported	85	1.4

Since some authorities consider that a diet satisfactory in other respects may qualify for class A if it includes one pint instead of one and one-half pints of milk, a count was made of all diets which were kept from this grade solely on account of lacking the extra half-pint of milk. It was found that they numbered only 23; in other words,

only 48 children, 0.8 per cent of the total number, would have been classed as having diets both adequate and suitable had the milk standard for this grade been 1 pint.

CHART I.—Distribution of children 2 to 7 years of age, by grade of diet.



Age.

A slight tendency toward better diets in the earlier years is indicated by Table 2, which shows a drop from 11 per cent of the 2-year-old children in A or B groups to 7.7 per cent of those 7 years of age in the same groups, and a corresponding increase in the percentage having D or E diets. These differences are not sufficient, however, to warrant the assumption that the younger children were given any special consideration in the matter of feeding.

TABLE 2.—*Grade of diet, by age of child.*

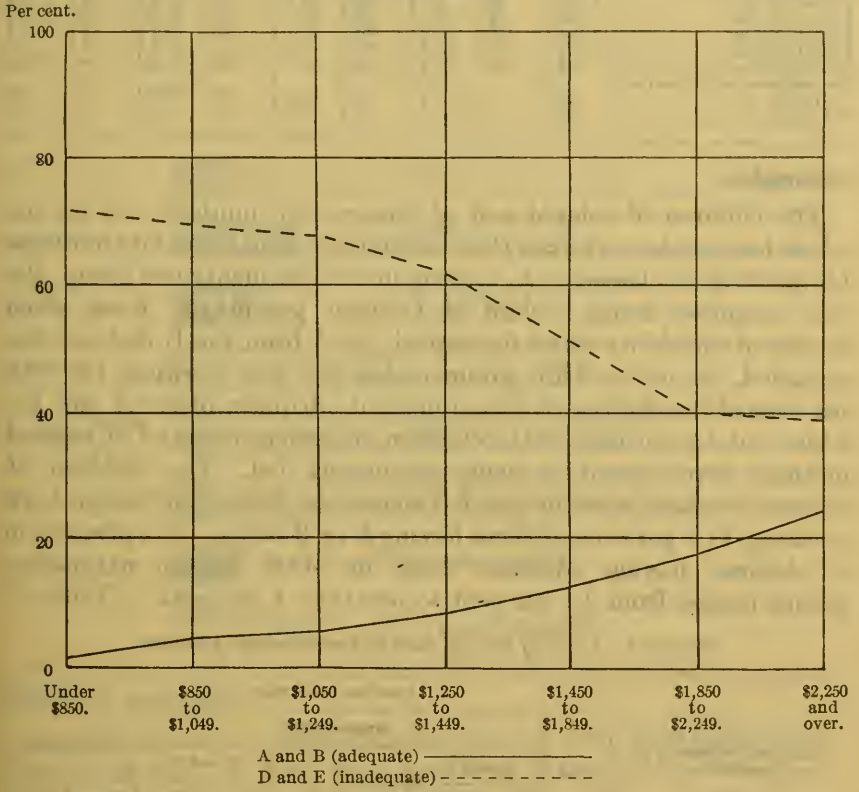
Age of child.	Children 2 to 7 years of age.							
	Total.	Grade of diet.					Not reported.	
		A and B.		C.		D and E.		
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	334	8.9	1,757	29.2	3,639	60.5	85	1.4
2 years, under 3	1,079	119	11.0	350	32.4	601	55.7	9	0.8
3 years, under 4	1,437	126	8.7	450	31.3	844	58.7	17	1.2
4 years, under 5	1,233	104	8.4	348	28.2	760	61.6	21	1.7
5 years, under 6	1,100	98	8.9	290	26.4	695	63.2	17	1.5
6 years, under 7	1,008	75	7.4	282	28.0	637	63.2	14	1.4
7 years, under 8	156	12	7.7	37	23.7	100	64.1	7	4.5
Not reported	2	.....	.....	.....	.....	2	.....	.....	.....

[1] Not shown where base is less than 100.

Income.

That income is a contributing factor in the inadequate feeding of children is evident from Chart II. The proportion of adequate diets (A and B) increases gradually from the lowest income level to the highest, and the proportion of inadequate diets (D and E) likewise decreases progressively with the rise in earnings, a sudden drop occurring at the $1,850 income level. But the actual proportions of

CHART II.—Per cent of children 2 to 7 years of age with adequate and with inadequate diet, by earnings of chief breadwinner.



adequate and inadequate diets in the highest income group show clearly that poverty is not the sole cause of faulty feeding. In the most prosperous group only 24.5 per cent of the children appeared to have adequate diets, and 38.8 per cent of them had definitely unsatisfactory ones. (Table 3.) The conclusion to which these data lead—that the need for education regarding the food needs of growing children is not restricted to low income groups—is borne out by other sections of the report which follow.

TABLE 3.—*Grade of diet, by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.							
	Total.	Grade of diet.					Not reported.	
		A and B.		C.		D and E.		
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	534	8.9	1,757	29.2	3,639	60.5	85	1.4
Under $850	851	12	1.4	215	25.3	610	71.7	14	1.6
$850 to $1,049	923	40	4.3	235	25.5	640	69.3	8	.9
$1,050 to $1,249	1,065	59	5.5	270	25.4	721	67.7	15	1.4
$1,250 to $1,449	843	71	8.4	239	28.4	522	61.9	11	1.3
$1,450 to $1,849	1,041	133	12.8	361	34.7	532	51.1	15	1.4
$1,850 to $2,249	378	67	17.7	158	41.8	151	39.9	2	.5
$2,250 and over	441	108	24.5	153	34.7	171	38.8	9	2.0
No chief breadwinner and no earnings	129	7	5.4	31	24.0	89	69.0	2	1.6
Not reported	344	37	10.8	95	27.6	203	59.0	9	2.6

Nationality.

The children of colored and of foreign-born mothers had on the whole less satisfactory diets than the children of native white mothers. Of the 25 diets classed as A, 24 were in the last-mentioned group, the one exception being a child of German parentage. Even when factors of suitability which distinguish the A from the B diet are disregarded, the native white group makes the best showing, for 19.2 per cent of the children in this group had adequate diets (A and B), while but 4.3 per cent of the children of foreign-born and of colored mothers were classed as being adequately fed. The children of German mothers were the best fed among the children of foreign-born mothers, 11.4 per cent of them having A or B diets. The proportion of children having adequate diets in other foreign nationality groups ranged from 2.4 per cent to less than 1 per cent. (Table 4.)

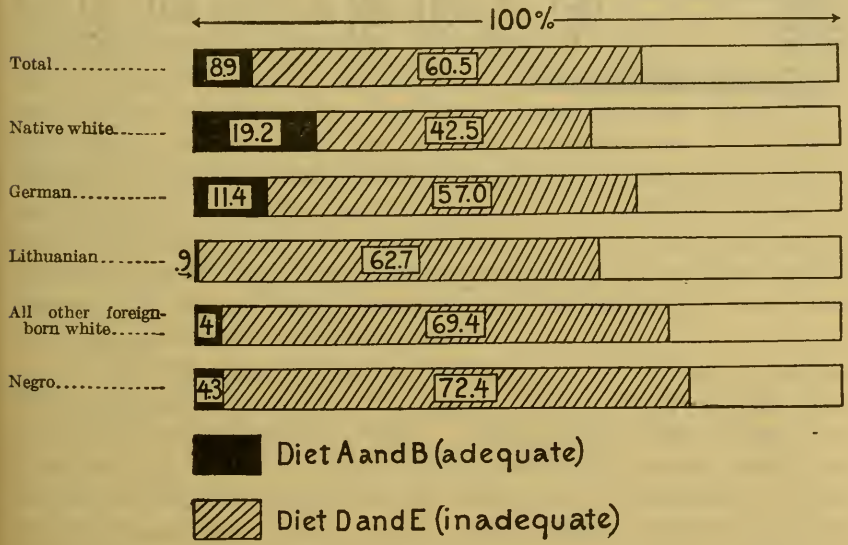
TABLE 4.—*Grade of diet, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.							
	Total.	Grade of diet.					Not reported.	
		A and B.		C.		D and E.		
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	534	8.9	1,757	29.2	3,639	60.5	85	1.4
White	5,777	522	9.0	1,706	29.5	3,469	60.0	80	1.4
Native	1,843	354	19.2	667	36.2	783	42.5	39	2.1
Foreign-born	3,934	168	4.3	1,039	26.4	2,686	68.3	41	1.0
Polish	923	10	1.1	205	22.2	698	75.6	10	1.1
Serbo-Croatian	587	14	2.4	143	24.4	425	72.4	5	.9
Slovak	546	12	2.2	114	20.9	419	76.7	1	.2
Magyar	291	6	2.1	62	21.3	221	75.9	2	.7
Italian	265	4	1.5	51	19.2	204	77.0	6	2.3
German	228	26	11.4	69	30.3	130	57.0	3	1.3
Lithuanian	225	2	.9	76	33.8	141	62.7	6	2.7
All other	869	94	10.8	319	36.7	448	51.6	8	.9
Negro	232	10	4.3	49	21.1	168	72.4	5	2.2
Not reported	6	2	.....	2	.....	2	.....	.....	.....

[1] Not shown where base is less than 100.

The poor diets of the children of the foreign born are even more apparent when the proportion of inadequate diets is considered. Barring the German and the Lithuanian groups, whose records were slightly better (57 and 62.7 per cent, respectively, inadequate), seven-tenths of the children of foreign-born and colored mothers had diets classified as inadequate (D or E), and most of the remainder, as Chart III illustrates, had diets graded as questionable (C). The record of the native whites, though noticeably better than the others, is far from being a matter of pride, since not far from half of these children (42.5 per cent) were in the groups D and E.

CHART III.—Per cent of children 2 to 7 years of age with adequate and with inadequate diet, by nationality of mother.



District of residence.

In Ambridge and in the First Subdivision, the two most favored districts of the city, the diets were somewhat better than in other sections, those of 30.2 per cent of the children in the former and 19.5 per cent in the latter section being adequate and those of 30.9 per cent and 40.9 per cent, respectively, being inadequate. This record is far from good, and deserves commendation only in comparison with the poorer records of Tolleston and the South Side. In each of these districts only 4.6 and 2.7 per cent of the children were adequately fed; about 70 per cent were receiving distinctly inadequate diets, and the remainder questionable ones. (Table 5.) This indicates that nearly the entire preschool population of these sections—which contained about two-thirds of all the children in the city—were being inadequately fed. (See p. 14.)

TABLE 5.—*Grade of diet, by district of residence.*

District of residence.	Children 2 to 7 years of age.							
	Total.	Grade of diet.					Not reported.	
		A and B.		C.		D and E.		
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]
Total	6,015	534	8.9	1,757	29.2	3,639	60.5	85	1.4
Ambridge	162	49	30.2	61	37.7	50	30.9	2	1.2
Clark	40	1	.....	8	.....	31	.....	.....	.....
First Subdivision	1,496	291	19.5	570	38.1	612	40.9	23	1.5
Lincoln Park	99	4	.....	21	.....	72	.....	2	.....
Ridge Road and Glen Park	393	61	15.5	142	36.1	179	45.5	11	2.8
South Side	2,890	77	2.7	715	24.7	2,064	71.4	34	1.2
Tolleston	892	41	4.6	222	24.9	616	69.1	13	1.5
West Gary	43	10	.....	18	.....	15	.....	.....	.....

[1] Not shown where base is less than 100.

USE OF SPECIFIED FOODS.

The particular dietary limitations and other factors responsible for the large proportions of deficient diets which have been described, will be disclosed in the following detailed study of the diets in respect to the use of specific foods and the customs regarding certain dietary practices.

Food combinations which are capable of furnishing a diet satisfactory in every way for the normal nutrition of a growing child exist in wide variety. It is possible indeed to choose two or three foods which, if eaten in sufficient amounts, may meet all the body's requirements for growth and maintenance. Obviously, however, these foods must be so chosen that their dietary properties supplement one another in such a way as to form a complete diet. Fresh whole milk and a whole cereal are one such combination. It is highly doubtful, however, whether the average human being would day in and day out eat enough of so monotonous a diet as cereal and milk to cover his energy and other requirements. In order to avoid this monotony and to insure a sufficient amount of the various food elements, it is obvious that in the absence of knowledge of food values safety lies in using a variety of foods.

In outlining diets for young children it is customary to include daily the following foods: Milk, potato and other vegetables, fruit, cereal, and either egg, fish, or meat. Such a general plan allows much freedom of choice in the way of vegetables, fruits, cereals, breads, and simple sweets, but supplies all the needed food constituents. Even though a satisfactory diet can be provided without some of these foods, the safer course is to include them all in the regular daily menus. The extent to which these foods, individually and in combination, are present or lacking in the diets studied may therefore be considered with profit.

Milk.

It is no mere bit of sentimentality that causes milk to be termed the "indispensable food" of childhood. The term is literally deserved, for though an expert might devise a diet for early childhood which did not include milk, the task would not be easy; and it may be taken for granted that the diet which does not include milk is inadequate. With this one food lacking a diet is almost certain to be deficient in the calcium so necessary for the growth of bones and teeth; and it is almost equally sure to be low in the best growth proteins, in phosphorus and other essential minerals, and in one or

more of the vitamines. On the other hand, milk alone, in plenty, goes a long way toward making a satisfactory diet for a growing child and toward covering the deficiencies of an otherwise hopeless diet. Hence it is spoken of with equal correctness as a "protective food."

The amount of milk actually required by a young child daily is not easily determined. "A quart of milk a day for every child" is the slogan adopted by many nutrition specialists. Some who believe the quart a wise allowance accept 1½ pints as possibly sufficient and as a more practical amount. According to almost universal agreement, a pint of milk at the very least should be provided for every child daily.

In the light of such standards the children of this survey made a poor showing indeed. Only 8.4 per cent of the total group were drinking 1½ pints or more of milk a day, and but 10.5 per cent were drinking a pint. (Table 6.) In other words, only 18.9 per cent of all these preschool children were receiving daily at least a pint of milk, the amount universally agreed upon as the minimum they should be given. Some of the remainder were receiving smaller amounts—18.1 per cent had about half a pint, and 3.4 per cent less than half a pint. More than half of all the children (57.2 per cent) had no milk at all to drink on the day for which diet was reported.

TABLE 6.—*Amount of milk used as beverage.*

Amount of milk used as beverage.	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
No milk	3,443	57.2
Less than 1 pint	1,294	21.5
Less than ½ pint	206	3.4
½ pint, less than 1 pint	1,088	18.1
1 pint and over	1,139	18.9
1 pint, less than 1½ pints	633	10.5
1½ pints and over	506	8.4
Not reported	139	2.3

When it is borne in mind that these children were all in the early years of childhood—the time, outside of infancy, when milk is most needed—the significance of such deprivation becomes forcefully apparent.

The amounts of milk just considered refer only to milk used as a beverage. Milk taken in food is likely to be a variable and uncertain supply. Nevertheless, in order to give due credit for all milk used whether as a beverage or in food, the schedules were gone over and checked as having "milk in food" if custards, milk gravies, milk

soups, or other foods containing milk were present. Even after credit was given for milk in food, 970 children, or 16.1 per cent of the total number, remained whose diet contained no milk whatever. (Table 7.) A total of 21.8 per cent had no milk in food and less than a pint to drink. Furthermore, 38.5 per cent had no milk except the amounts they might get in foods—and it is extremely unlikely that this amount ever reached a pint. (Table 8.) Three-fifths of the group studied (60.3 per cent), therefore, were probably receiving less than a pint of milk daily either in food, as a beverage, or in combination.

TABLE 7.—*Amount of milk used as beverage in absence of milk in food.*

Amount of milk used as beverage in absence of milk in food.	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
Total having no milk in food	1,714	28.5
With no milk as beverage	970	16.1
With less than 1 pint as beverage	343	5.7
With 1 pint and over as beverage	372	6.2
With amount as beverage not reported	29	0.5

TABLE 8.—*Amount of milk used as beverage in addition to milk used in food.*

Amount of milk used as beverage in addition to milk used in food.	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
Total having milk in food	3,916	65.1
With no milk as beverage	2,314	38.5
With less than 1 pint as beverage	860	14.3
With 1 pint and over as beverage	687	11.4
With amount as beverage not reported	55	.9

Use of milk and age of child.—It might be thought that the younger children—those 2 and 3 years old at least—would still be regarded by their mothers as infants and provided with a more generous amount of milk than older children. But although a slightly greater proportion of those 2 years than of those 7 years of age were receiving a pint or more to drink—22.8 per cent as compared with 14.1 per cent—the difference is not very great. (Table 9.)

TABLE 9.—*Amount of milk used as beverage, by age of child.*

Age of child.	Children 2 to 7 years of age.						
	Total.	Using specified amount of milk as beverage.				Not reported.	
		None and less than 1 pint.		1 pint and over.			
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.
Total	6,015	4,737	78.8	1,139	18.9	139	2.3
2 years, under 3	1,079	812	75.3	246	22.8	21	1.9
3 years, under 4	1,437	1,120	77.9	288	20.0	29	2.0
4 years, under 5	1,233	977	79.2	224	18.2	32	2.6
5 years, under 6	1,100	889	80.8	191	17.4	20	1.8
6 years, under 7	1,008	810	80.4	168	16.7	30	3.0
7 years, under 8	156	127	81.4	22	14.1	7	4.5
Not reported	2	2					

[1] Not shown where base is less than 100.

Use of milk and income.—A partial explanation of the fact that these children were not better provided with milk is found by studying the milk consumption in relation to the father's earnings. Table 10 shows a decided improvement in the milk record after the income reaches $1,250. When the father's earnings were less than this amount more than 60 per cent of the children had no milk at all to drink and less than 15 per cent had at least a pint. After the income reached $1,250, however, the proportion having no milk to drink declined progressively from 58.6 per cent in the $1,250 to $1,449 group to 38.5 per cent in the $2,250 and over group, while the proportion having a pint or more increased from 18.5 per cent to 31.5 per cent. The higher the income, in other words, the greater was the use of milk as a beverage.

TABLE 10.—*Amount of milk used as beverage, by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.								
	Total.	Using no milk as beverage.		Using specified amount of milk as beverage.				Not reported.	
				Less than 1 pint.		1 pint and over.			
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	3,443	57.2	1,294	21.5	1,139	18.9	139	2.3
Under $850	851	529	62.2	199	23.4	100	11.8	23	2.7
$850 to $1,049	923	584	63.3	200	21.7	127	13.8	12	1.3
$1,050 to $1,249	1,065	676	63.5	216	20.3	148	13.9	25	2.3
$1,250 to $1,449	843	494	58.6	176	20.9	156	18.5	17	2.0
$1,450 to $1,849	1,041	538	51.7	234	22.5	248	23.8	21	2.0
$1,850 to $2,249	378	168	44.4	87	23.0	117	31.0	6	1.6
$2,250 and over	441	170	38.5	112	25.4	139	31.5	20	4.5
No chief breadwinner and no earnings	129	76	58.9	23	17.8	25	19.4	5	3.9
Not reported	344	208	60.5	47	13.7	79	23.0	10	2.9

That low income is not solely responsible for the absence of milk from the diets is equally evident from Table 10; for in spite of the more extensive use of milk in the highest earnings group, there still remain 38.5 per cent of this group who were drinking no milk, and only 31.5 per cent of them were receiving a pint or more daily.

Use of milk and nationality.—A comparison by nationalities (Table 11) shows that the children of Italian mothers received by far the least amount of milk, only 6.8 per cent having so much as a pint daily, and 75.1 per cent having none. The children of Magyar and Slovak mothers fared little better, however, for only about 8 per cent of these were in the group receiving at least a pint a day and more than 70 per cent were in the group receiving no milk at all. Children of Polish, Lithuanian, Negro, and Serbo-Croatian mothers had a slightly better record, ranging from 12.4 to 16.7 per cent with a pint or more, and from 57.3 to 65.5 per cent with none. Children of native white and those of German parentage were above the average, 27.9 per cent of the former having a pint or more and 46.9 per cent having none, while of the latter 26.3 per cent had a pint or more and 51.8 per cent had none.

TABLE 11.—*Amount of milk used as beverage, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.								
	Total.	Using no milk as beverage.		Using specified amount of milk as beverage.				Not reported.	
				Less than 1 pint.		1 pint and over.			
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	3,443	57.2	1,294	21.5	1,139	18.9	139	2.3
White	5,777	3,289	56.9	1,257	21.8	1,099	19.0	132	2.3
Native	1,843	865	46.9	410	22.2	515	27.9	53	2.9
Foreign-born	3,934	2,424	61.6	847	21.5	584	14.8	79	2.0
Polish	923	595	64.5	202	21.9	114	12.4	12	1.3
Serbo-Croatian	587	351	59.8	120	20.4	98	16.7	18	3.1
Slovak	546	402	73.6	93	17.0	49	9.0	2	0.4
Magyar	291	206	70.8	54	18.6	24	8.2	7	2.4
Italian	265	199	75.1	37	14.0	18	6.8	11	4.2
German	228	118	51.8	47	20.6	60	26.3	3	1.3
Lithuanian	225	129	57.3	56	24.9	30	13.3	10	4.4
All other	869	424	48.8	238	27.4	191	22.0	16	1.8
Negro	232	152	65.5	36	15.5	37	15.9	7	3.0
Not reported	6	2	.....	1	.....	3	.....	.....	.....

[1] Not shown where base is less than 100.

Use of milk and district of residence.—An examination of the milk record of the two sections of the city where the large majority of the children lived—the First Subdivision, and the South Side including Tolleston—does not show so great a difference in favor of the former as its larger percentage of native whites, its greater prosperity, and

its generally higher standard of living would lead one to expect. Of the children in this more favored residence district 44.7 per cent had no milk to drink and only 30.1 per cent had so much as the pint minimum. In the South Side and Tolleston, with their larger percentage of foreign born and lesser advantages, approximately two-thirds (64.6 per cent) of the children were in the "no milk" class and only 13.2 per cent received a pint or more a day. (Table 12.)

TABLE 12.—*Amount of milk used as beverage, by district of residence.*

District of residence.	Children 2 to 7 years of age.								
	Total.	Using no milk as beverage.		Using specified amount of milk as beverage.				Not reported.	
				Less than 1 pint.		1 pint and over.			
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]
Total	6,015	3,443	57.2	1,294	21.5	1,139	18.9	139	2.3
Ambridge	162	51	31.5	54	33.3	55	34.0	2	1.2
Clark	40	28	.....	9	.....	3	.....	.....	.....
First Subdivision	1,496	669	44.7	342	22.9	450	30.1	35	2.3
Lincoln Park	99	57	.....	23	.....	16	.....	3	.....
Ridge Road and Glen Park	393	179	45.5	95	24.2	107	27.2	12	3.1
South Side	2,890	1,882	65.1	582	20.1	362	12.5	64	2.2
Tolleston	892	560	62.8	174	19.5	136	15.2	22	2.5
West Gary	43	17	.....	15	.....	10	.....	1	.....

[1] Not shown where base is less than 100.

Coffee or tea.

In marked contrast with the scanty use of milk stands the liberal use of coffee and tea as beverages among the children studied, of whom more than two-thirds (66.8 per cent) had coffee or tea on the day of the study, 26.8 per cent having it once, 23.5 per cent twice, and 16.4 per cent three times or more. (Table 13.)

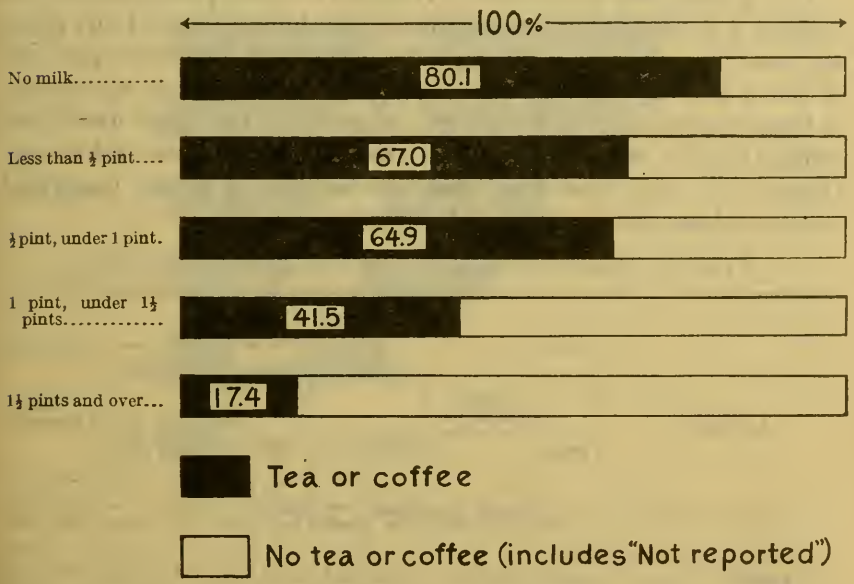
TABLE 13.—*Number of times tea or coffee used daily.*[1]

Number of times tea or coffee used daily.[1]	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
Using neither tea nor coffee	1,928	32.1
Using tea or coffee	4,017	66.8
Once	1,615	26.8
Twice	1,413	23.5
Three times and over	989	16.4
Not reported	70	1.2

[1] Information relates to day preceding agent's visit.

Relation between use of coffee[2] *and use of milk.*—An inverse relation between the coffee and milk consumption such as is commonly observed by social dietitians appears in the cases under study, as is strikingly shown in Table 14 and Chart IV. Whether the use of coffee tends to decrease the amount of milk consumed, or whether the use of coffee is occasioned by decreased milk supply, is hard to say. It is probable, in fact, that the rule works in both directions. Certain it is that in many cases when a child is allowed to have coffee he consequently refuses milk, which is bland and tasteless in com-

CHART IV.—Per cent of children 2 to 7 years of age using tea or coffee, by use of milk as a beverage.



parison, and coffee eventually displaces milk in his diet. On the other hand it is reported to be a common procedure in poorer homes—particularly among the foreign born—deliberately to introduce coffee as a substitute for milk. Both are regarded as mere beverages and coffee is chosen because it seems to be much the cheaper. Prohibiting the use of coffee in the former instance would probably increase the milk used, while increasing the milk purchased in the latter type of case—if this were possible—would doubtless do much to lessen the amount of coffee consumed.

[2] Throughout the remainder of this discussion, "coffee" will be used to indicate both coffee and tea.

TABLE 14.—*Use of tea and coffee, by amount of milk used as a beverage.*

Amount of milk used as a beverage.	Children 2 to 7 years of age.		
	Total.	Using tea or coffee.	
		Number.	Per cent.
Total	6,015	4,010	66.7
No milk	3,443	2,758	80.1
Less than ½ pint	206	138	67.0
½ pint, less than 1 pint	1,088	706	64.9
1 pint, less than 1½ pints	633	263	41.5
1½ pints and over	506	88	17.4
Not reported	139	57	41.0

Use of coffee and age of child.—A slightly higher percentage of the children 2 years of age were without coffee than of those of any other age, and the proportion having none diminished from 35.8 per cent in the 2-year age group to 27.6 per cent in the 7-year age group. A higher percentage of 3-year-old children, on the other hand, had coffee three or more times a day than of those of any other age. (Table 15.) Age, therefore, does not appear to be an important factor in determining the use of coffee.

TABLE 15.—*Number of times tea or coffee used daily,*[1] *by age of child.*

Age of child.	Children 2 to 7 years of age.									
	Total.	Using neither tea nor coffee.		Using tea or coffee specified number of times daily.[1]					Not reported.	
				Once.		Twice.		Three times and over.		
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[2]	Number.	Per cent.
Total	6,015	1,928	32.1	1,615	26.8	1,413	23.5	989	16.4	70	1.2
2 years, under 3	1,079	386	35.8	261	24.2	262	24.3	164	15.2	6	0.6
3 years, under 4	1,437	443	30.8	391	27.2	319	22.2	268	18.6	16	1.1
4 years, under 5	1,233	380	30.8	326	26.4	315	25.5	199	16.1	13	1.1
5 years, under 6	1,100	351	31.9	307	27.9	245	22.3	182	16.5	15	1.4
6 years, under 7	1,008	325	32.2	282	28.0	236	23.4	151	15.0	14	1.4
7 years, under 8	156	43	27.6	48	30.8	36	23.1	23	14.7	6	3.8
Not reported	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....

[1] Information relates to day preceding agent's visit. [2] Not shown where base is less than 100.

Use of coffee and income.—It has been suggested that the use of coffee by young children is one of the accompaniments of poverty. The truth of this assumption appears in Chart V, which shows a gradually decreasing use of coffee after the $1,250 income level is reached, the greatest drop being in the group whose fathers' earnings are $2,250 or over. Furthermore, the percentage of children drinking coffee twice a day or oftener declines from 49 per cent and 50.9 per cent, respectively, in the two lowest income groups to 24.4 per cent and 12.2 per cent in the two highest. (Table 16.) This increased consumption of coffee with lessened earnings is easily

understood. Not only is the coffee cheaper than milk, but as a hot, palatable drink it lends flavor to the monotonous bread diet so common in low income groups.

CHART V.—Per cent of children 2 to 7 years of age using tea or coffee, by earnings of chief breadwinner.

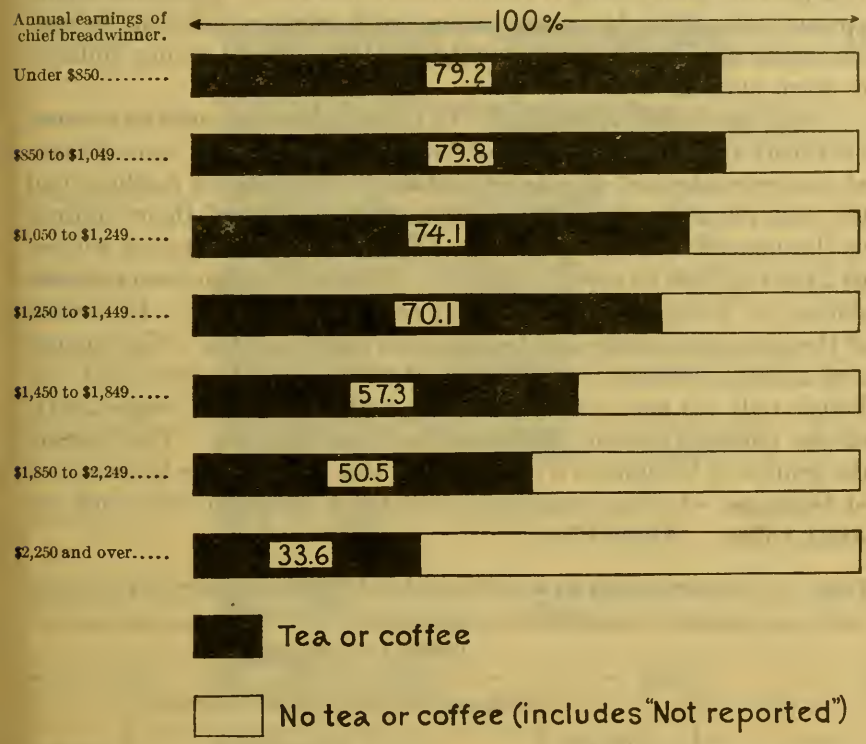


TABLE 16.—*Number of times tea or coffee used daily,*[1] *by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.											
	Total.	Using neither tea nor coffee.		Using tea or coffee specified number of times daily.[1]							Not reported.	
				Once.		More than once.						
						Total.		Twice.		Three times and over.		
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	1,928	32.1	1,615	26.8	2,402	39.9	1,413	23.5	989	16.4	70	1.2
Under $850	851	162	19.0	257	30.2	417	49.0	245	28.8	172	20.2	15	1.8
$850 to $1,049	923	179	19.4	267	28.9	470	50.9	269	29.1	201	21.8	7	.8
$1,050 to $1,249	1,065	264	24.8	298	28.0	491	46.1	265	25.3	222	20.8	12	1.1
$1,250 to $1,449	843	245	29.1	221	26.2	370	43.9	226	26.8	144	17.1	7	.8
$1,450 to $1,849	1,041	432	41.5	259	24.9	338	32.5	195	18.7	143	13.7	12	1.2
$1,850 to $2,249	378	185	48.9	99	26.2	92	24.3	60	15.9	32	8.5	2	.5
$2,250 and over	441	288	65.3	94	21.3	54	12.2	38	8.6	16	3.6	5	1.1
No chief breadwinner and no earnings	129	42	32.6	34	26.4	52	40.3	32	24.8	20	15.5	1	.8
Not reported	344	131	38.1	86	25.0	118	34.3	79	23.0	39	11.3	9	2.6

[1] Information relates to day preceding agent's visit.

The families with low incomes, then, do have the excuse of poverty for allowing children 2 to 7 years of age to drink coffee. But this explanation will not hold for the highest income group; fully one-third of the children in this group (33.6 per cent) drank coffee, and 12.2 per cent were having it two or three times a day. Ignorance would appear to be the only excuse parents with incomes sufficient to purchase the necessities of life could offer for allowing young children to form such habits.

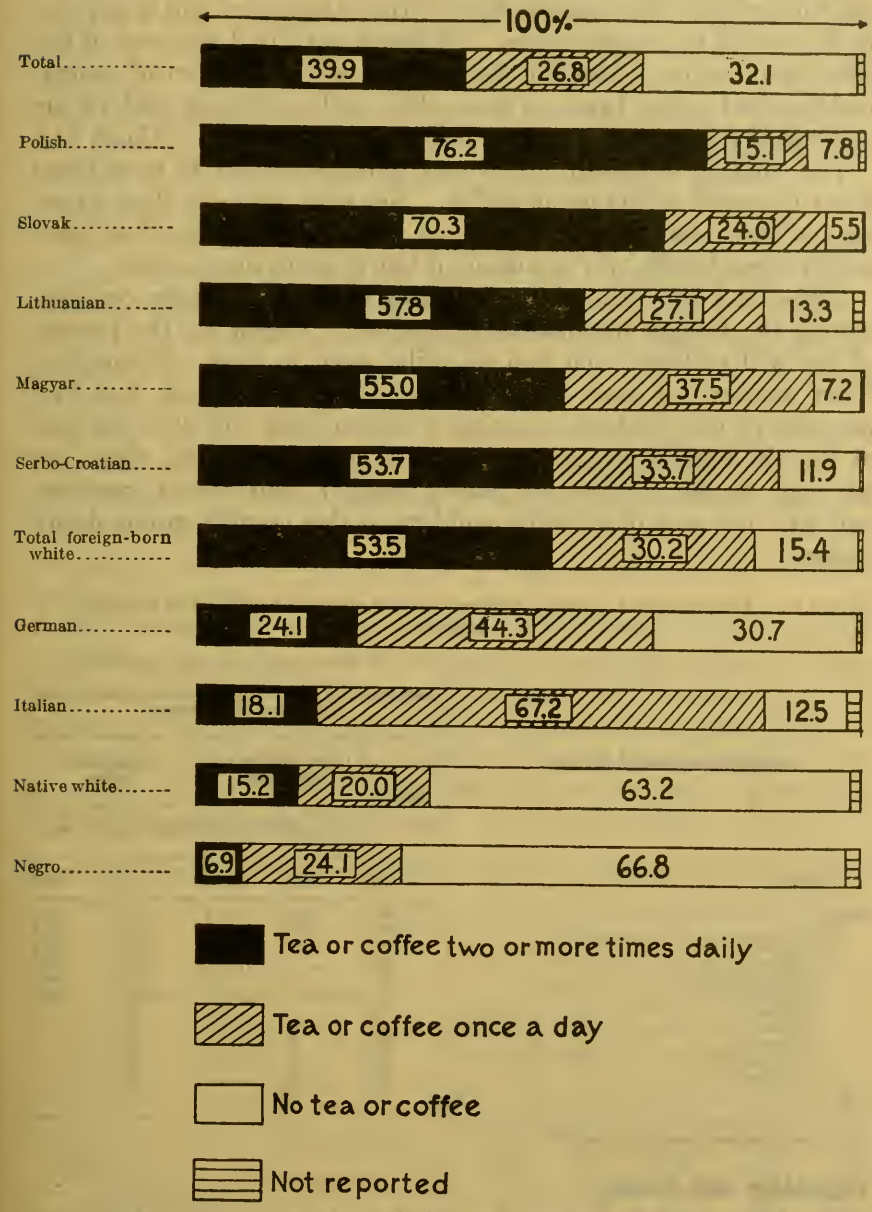
Use of coffee and nationality.—The coffee habit was found to be more prevalent among the children of the foreign born than among those of native white and of colored mothers. The colored mothers had the best record in this respect, with 66.8 per cent of their children in the noncoffee-drinking group. Of the children of native whites, 63.2 per cent had no coffee; while the children of foreign-born mothers showed an average of only 15.4 per cent without coffee. In certain of the groups of children of foreign-born parentage the coffee custom was nearly universal; among the Slovaks, the Magyars, and the Polish, only 5.5 per cent, 7.2 per cent, and 7.8 per cent, respectively, of the children were in the noncoffee-drinking group. Best among the groups of foreign-born parentage in this respect were the children of Germans, of whom practically one-third (30.7 per cent) did not drink coffee. (Table 17.)

TABLE 17.—*Number of times tea or coffee used daily,*[1] *by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.												
	Total.	Using neither tea nor coffee.		Using tea or coffee specified number of times daily.[1]								Not reported.	
				Once.		More than once.							
						Total.		Twice.		Three times and over.			
		Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	1,928	32.1	1,615	26.8	2,402	39.9	1,413	23.5	989	16.4	70	1.2
White	5,777	1,768	30.6	1,558	27.0	2,386	41.3	1,406	24.3	980	17.0	65	1.1
Native	1,843	1,164	63.2	368	20.0	280	15.2	194	10.5	86	4.7	31	1.7
Foreign-born	3,934	604	15.4	1,190	30.2	2,106	53.5	1,212	30.8	894	22.7	34	.9
Polish	923	72	7.8	139	15.1	703	76.2	349	37.8	354	38.4	9	1.0
Serbo-Croatian	587	70	11.9	198	33.7	315	53.7	171	29.1	144	24.5	4	.7
Slovak	546	30	5.5	131	24.0	384	70.3	216	39.6	168	30.8	1	.2
Magyar	291	21	7.2	109	37.5	160	55.0	110	37.8	50	17.2	1	.3
Italian	265	33	12.5	178	67.2	48	18.1	35	13.2	13	4.9	6	2.3
German	228	70	30.7	101	44.3	55	24.1	38	16.7	17	7.5	2	.9
Lithuanian	225	30	13.3	61	27.1	130	57.8	84	37.3	46	20.4	4	1.8
All other	869	278	32.0	273	31.4	311	35.8	209	24.1	102	11.7	7	.8
Negro	232	155	66.8	56	24.1	16	6.9	7	3.0	9	3.9	5	2.2
Not reported	6	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Information relates to day preceding agent's visit.
[2] Not shown where base is less than 100.

CHART VI.—Per cent of children 2 to 7 years of age using tea or coffee, by nationality of mother.



Not only is coffee drinking more common among the children of the foreign born than among those of the native born, but it appears to be carried to greater excess. Whereas only 15.2 per cent of the children of native white and 6.9 per cent of the children of colored mothers had coffee twice or more often daily, 53.5 per cent of the children of foreign-born mothers had it thus frequently. (Chart VI.)

The children of Polish and Slovak mothers appear to have fared worst in regard to the use of coffee. Not only did more than 90 per cent of the children of each of these groups drink coffee, but practically three-fourths of them drank it two or more times a day.

Coffee as a substitute for milk seems likewise especially common among the foreign nationality groups, as is shown by the records of the 970 children who had no milk, even in food. (Table 18.) Even among the cases in which no milk was received, but 54.8 per cent of the children of native white mothers and 28.6 per cent of the children of colored mothers had coffee to drink, while 100 per cent of the children of Polish, Magyar, and Slovak mothers, and 94.8 per cent of all other children in this no-milk group, drank coffee.

TABLE 18.—*Use of tea and coffee by children who had no milk, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age who had no milk either in food or as a beverage.				
	Total.	Using neither tea nor coffee.		Using tea or coffee.	
		Number.	Per cent.[1]	Number.	Per cent.[1]
Total	970	192	19.8	778	80.2
White	879	127	14.4	752	85.6
Native	241	109	45.2	132	54.8
Foreign-born	638	18	2.8	620	97.2
Polish	128	.....	.....	128	100.0
Serbo-Croatian	131	2	1.5	129	98.5
Slovak	113	.....	.....	113	100.0
Magyar	53	.....	.....	53	.....
Italian	35	1	.....	34	.....
German	36	2	.....	34	.....
Lithuanian	57	1	.....	56	.....
All other	85	12	.....	73	.....
Negro	91	65	.....	26	.....

[1] Not shown where base is less than 100.

Vegetables and fruits.

Vegetables and fruits are depended on to a considerable extent to supply the body with its needed mineral salts as well as to furnish indigestible residue and organic acids which are important in preventing constipation. They are, moreover, valuable sources of the vitamines. In view of these important functions it is significant that more than half (50.4 per cent) of the children studied had no

vegetables other than potatoes and that nearly two-thirds (60.1 per cent) had no fruit of any kind. (Table 19.) These figures, moreover, are conservative, for every vegetable mentioned in the schedules—even those of such doubtful value and used, probably, in such negligible amount as cucumbers, radishes, and green peppers—was given full credit as one vegetable, and jelly and preserves were counted as fruits. Vegetables and fruits evidently occupied but a minor place in the dietaries of this group of children.

Use of vegetables and fruits, and nationality.—The children of foreign-born mothers fared less well on the average in this respect than the children of native white mothers, 53.7 per cent of the former group being without vegetables and 67.6 per cent without fruits, in contrast with 44.2 per cent of the latter group having no vegetables and 43.5 per cent having no fruits.

Certain of the foreign nationality groups stand conspicuously below the average in the use of these foods, as is shown in Table 19. The children of Lithuanian and Serbo-Croatian mothers were the least well provided for, not far from two-thirds being without vegetables and about three-fourths having no fruits in each of these nationality groups.

The Italians are usually credited with generous use of green vegetables and fruits, and in this study they have indeed a more favorable showing in this respect than any other nationality group except the Magyars, not even excepting the native whites. In this instance they can scarcely be regarded as using these foods liberally, however, since 41.5 per cent of the children of Italian parentage had no vegetables and 60 per cent were without fruits.

TABLE 19.—*Absence of fruits and vegetables from diet, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.				
	Total.	Having no vegetables in diet.		Having no fruits in diet.	
		Number.	Per cent.[1]	Number.	Per cent.[1]
Total	6,015	3,032	50.4	3,615	60.1
White	5,777	2,928	50.7	3,459	59.9
Native	1,843	815	44.2	301	43.5
Foreign-born	3,934	2,113	53.7	2,658	67.6
Polish	923	546	59.2	647	70.1
Serbo-Croatian	587	363	61.8	468	79.7
Slovak	546	282	51.6	414	75.8
Magyar	291	113	38.8	196	67.4
Italian	265	110	41.5	159	60.0
German	228	96	42.1	119	52.2
Lithuanian	225	144	64.0	167	74.2
All other	869	459	52.8	488	56.2
Negro	232	101	43.5	154	66.4
Not reported	6	3	.....	2	.....

[1] Not shown where base is less than 100.

Use of vegetables and fruits, and income.—According to Table 20, the income of the family appears to be an important factor in determining whether or not children shall have fruits, but it would seem to affect scarcely at all the likelihood of their having vegetables. This is in accord with experience of social dietitians who find that fruit is well liked by children and is eaten whenever it can be had, but that it is regarded by their parents as a luxury and purchased for the most part only after what they consider essential has been provided. Vegetables, on the other hand, are not only little appreciated by parents save as flavoring for soup, but—with the exception of lettuce, radishes, cucumbers, and perhaps tomatoes—are usually disliked by children and therefore little eaten even when at hand. This explanation may account for the slight variation in the use of vegetables in the different income groups, a less variation than with any other items of food.

TABLE 20.—*Absence of fruits and vegetables from diet, by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.				
	Total.	Having no vegetables in diet.		Having no fruits in diet.	
		Number.	Per cent.	Number.	Per cent.
Total	6,015	3,032	50.4	3,615	60.1
Under $850	851	462	54.3	614	72.2
$850 to $1,049	923	508	55.0	624	67.6
$1,050 to $1,249	1,065	567	55.2	674	63.3
$1,250 to $1,449	843	417	49.5	503	59.7
$1,450 to $1,849	1,041	485	46.6	581	55.8
$1,850 to $2,249	378	149	39.4	169	44.7
$2,250 and over	441	196	44.4	134	30.4
No chief breadwinner and no earnings	129	76	58.9	98	76.0
Not reported	344	172	50.0	218	63.4

Potatoes.

Potatoes were found in many cases to be the one redeeming feature of an otherwise totally deficient diet. Taking the place, as they usually do, of other starchy foods—bread, macaroni, rice—they improve the diet in several respects. The starchy foods named are valuable for little more than the energy which they yield, while potatoes furnish the same energy and valuable minerals in addition, especially if cooked in their skins. Potatoes, moreover, leave an alkaline residue on oxidation in the body, in contrast with the acid residue left by bread or rice. In view of these dietary properties of the potato as well as of the extremely limited use of other vegetables and of fruits, it is gratifying to find that nearly two-thirds (62.7 per cent) of the children whose diets were studied had potatoes

once a day or oftener—48.7 per cent having them once, and 14 per cent two or even three times. (Table 21.)

TABLE 21.—*Number of times potatoes used daily,*[1] *by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.											
	Total.	Having no potatoes in diet.		Having potatoes specified number of times daily.[1]							Not reported.	
				Total.		Once.		Twice.		Three times and over.		
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	2,169	36.1	3,774	62.7	2,932	48.7	781	13.0	61	1.0	72	1.2
Under $850	851	382	44.9	454	53.3	352	41.4	84	9.9	18	2.1	15	1.8
$850 to $1,049	923	428	46.4	488	52.9	396	42.9	91	9.9	1	.1	7	.8
$1,050 to $1,249	1,065	434	40.8	619	58.1	503	47.2	105	9.9	11	1.0	12	1.1
$1,250 to $1,449	843	276	32.7	560	66.4	446	52.9	102	12.1	12	1.4	7	.8
$1,450 to $1,849	1,041	280	26.9	748	71.9	556	53.4	182	17.5	10	1.0	13	1.2
$1,850 to $2,249	378	100	26.5	276	73.0	214	56.6	59	15.6	3	.8	2	.5
$2,250 and over	441	101	22.9	335	76.0	227	51.5	103	23.4	5	1.1	5	1.1
No chief breadwinner and no earnings	129	48	37.2	79	61.2	65	50.4	14	10.9	.....	.....	2	1.6
Not reported	344	120	34.9	215	62.5	173	50.3	41	11.9	1	.3	9	2.6

[1] Information relates to day preceding agent's visit.

Use of potatoes and nationality.—As might be expected, the native whites and the Germans were responsible for the high average use of potatoes, 82.4 per cent of the children of the former and 69.7 per cent of those of the latter having had potatoes. Of the children of Slovak mothers 60.4 per cent, and of those of Polish, Lithuanian, and Magyar mothers 56, 52, and 46.4 per cent, respectively, had potatoes. Only 43.1 per cent of the children of Serbo-Croatian mothers had potatoes, while at the bottom of the list were the Italians with only 37.4 per cent having this article of diet, or, to put the matter conversely, with 60.4 per cent—three-fifths—having none at all. Considering the general use of spaghetti and macaroni in this group this small use of potatoes is not surprising.

Use of potatoes and income.—Though potatoes were used more generally than any other of the special items discussed except meat, the consumption of this food increased somewhat in the higher income groups. This is shown by the fact that 44.9 per cent of the children in the group with earnings under $850 were without potatoes, while but 22.9 per cent of the children in the highest earnings group lacked them. (Table 21.)

Cereals.

Although cereals—in the sense of breakfast foods—can not be considered absolutely essential in a child's dietary, it is the judgment of specialists that a well-cooked cereal can wisely be made a regular

part of a young child's breakfast. It provides a warm, bland, easily digested food for the morning meal and makes an excellent carrier for milk. Moreover, if whole cereals are used for at least a part of the time, the iron, phosphorus, and vitamine contributions are quite considerable. The custom of the children studied in respect to the use of this article of diet, therefore, was noted with interest.

A glance at Table 22 shows that cereals played but a small part in the dietaries of these children, only 20.8 per cent of the total number of children being reported as having a cereal on the day of the study.

Use of cereals and nationality.—The children of native white mothers, even though less than one-third (32.1 per cent) of them had a cereal, appear to have been the greatest users of cereals. Next in order are the children of German and Polish mothers, with 21.1 and 16.3 per cent, respectively, having a cereal. The children of the Serbo-Croatian, the Italian, and the Lithuanian mothers may be considered as not using cereals, since but 8.5, 8.3, and 6.2 per cent, respectively, of the children in these groups had cereal the day the record was taken.

TABLE 22.—*Use of cereal in diet, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.						
	Total.	Having no cereal in diet.		Having cereal in diet.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]
Total	6,015	4,606	76.6	1,249	20.8	160	2.7
White	5,777	4,408	76.3	1,215	21.0	154	2.7
Native	1,843	1,142	62.0	591	32.1	110	6.0
Foreign-born	3,934	3,266	83.0	624	15.9	44	1.1
Polish	923	764	82.8	150	16.3	9	1.0
Serbo-Croatian	587	533	90.8	50	8.5	4	.7
Slovak	546	431	78.9	114	20.9	1	.2
Magyar	291	251	86.3	38	13.1	2	.7
Italian	265	237	89.4	22	8.3	6	2.3
German	228	175	76.8	48	21.1	5	2.2
Lithuanian	225	207	92.0	14	6.2	4	1.8
All other	869	668	76.9	188	21.6	13	1.5
Negro	232	196	84.5	31	13.4	5	2.2
Not reported	6	2	.....	3	.....	1	.....

[1] Not shown where base is less than 100.

Use of cereals and income.—Since cereals are among the cheapest foods available, they should show little variation in use with income. Nevertheless the difference between the lowest and highest earnings groups in the use of cereals is not inconsiderable, 12.6 per cent of the children in the former and 29.9 per cent of those in the latter group having them. (Table 23.) Neither group, however, as these percentages show, used them to any great extent.

TABLE 23.—*Use of cereal in diet, by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.						
	Total.	Having no cereal in diet.		Having cereal in diet.		Not reported.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	4,606	76.6	1,249	20.8	160	2.7
Under $850	851	728	85.5	107	12.6	16	1.9
$850 to $1,049	923	752	81.5	164	17.8	7	0.8
$1,050 to $1,249	1,065	831	78.0	218	20.5	16	1.5
$1,250 to $1,449	843	644	76.4	177	21.0	22	2.6
$1,450 to $1,849	1,041	760	73.0	249	23.9	32	3.1
$1,850 to $2,249	378	262	69.3	101	26.7	15	4.0
$2,250 and over	441	274	62.1	132	29.9	35	7.9
No earnings and no chief breadwinner	129	100	77.5	28	21.7	1	.8
Not reported	344	255	74.1	73	21.2	16	4.7

Eggs.

An egg—or at least the yolk of it—is usually included in the daily diet of young children who are being fed with due consideration for their bodily needs. The white is not regarded as essential if milk, which also provides good growth proteins, is liberally used, but the yolk is desirable in any case because of its valuable iron and phosphorus. If for any reason the milk supply is low, the need of eggs in the diet becomes more urgent.

The records on which this study is based were obtained during the spring and summer months, when eggs are cheapest and can be expected to be more commonly used. This record, therefore, doubtless does full justice to the use of eggs on the part of these children.

Use of eggs and nationality.—An examination of Table 24 shows that the diets of more than half (59.5 per cent) the children were without eggs and that a still larger percentage in most of the race and nationality groups lacked them. Classified according to the absence of eggs from the diets of the children, the Negroes and the Polish come first, the Slovaks, Italians, Lithuanians, Serbo-Croatians, and Magyars second, and the Germans and the native whites third. About three-fourths of the children in Group 1, two-thirds of those in Group 2, and one-half of those in Group 3 had diets including no eggs.

TABLE 24.—*Number of times eggs used daily,*[1] *by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.										
	Total.	Having no eggs in diet.		Having eggs specified number of times daily.[1]						Not reported.	
				Once.		Twice.		Three times and over.			
		Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.	Number.	Per cent.
Total	6,015	3,577	59.5	1,927	32.0	394	6.6	45	0.7	72	1.2
White	5,777	3,394	58.8	1,889	32.7	383	6.6	45	0.8	66	1.1
Native	1,843	886	48.1	787	42.7	121	6.6	18	1.0	31	1.7
Foreign-born	3,934	2,508	63.8	1,102	28.0	262	6.6	27	.7	35	.9
Polish	923	696	75.4	175	19.0	40	4.3	3	.3	9	.9
Serbo-Croatian	587	375	63.9	168	28.6	37	6.3	3	.5	4	.7
Slovak	546	373	68.3	144	26.4	27	4.9	1	.2	1	.2
Magyar	291	184	63.2	80	27.5	24	8.2	1	.3	2	.7
Italian	265	180	67.9	63	23.8	13	4.9	3	1.1	6	2.3
German	228	111	48.7	92	40.4	22	9.6	1	.4	2	.9
Lithuanian	225	150	66.7	58	25.8	12	5.3	1	.4	4	1.8
All other	869	439	50.5	322	37.1	87	10.0	14	1.6	7	.8
Negro	232	179	77.2	37	15.9	10	4.3	.....	.....	6	2.6
Not reported	6	4	.....	1	.....	1	.....	.....	.....	.....	.....

[1] Information relates to day preceding agent's visit.
[2] Not shown where base is less than 100.

Use of eggs and income.—The presence or absence of eggs in the dietary appears to bear some relation likewise to income, since the proportion of diets containing eggs increases from 30.6 per cent in the group with incomes under $850 to 56.7 per cent in that with earnings of $2,250 or over. (Table 25.)

TABLE 25.—*Use of eggs in diet, by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.					
	Total.	Having no eggs in diet.		Having eggs in diet.		Not reported.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	3,577	59.5	2,366	39.3	72	1.2
Under $850	851	576	67.7	260	30.6	15	1.8
$850 to $1,049	923	591	64.0	325	35.2	7	.8
$1,050 to $1,249	1,065	701	65.8	351	33.0	13	1.2
$1,250 to $1,449	843	493	58.5	343	40.7	7	.8
$1,450 to $1,849	1,041	555	53.5	473	45.4	13	1.2
$1,850 to $2,249	378	178	47.1	198	52.4	2	.5
$2,250 and over	441	186	42.2	250	56.7	5	1.1
No chief breadwinner and no earnings	129	85	65.9	43	33.3	1	.8
Not reported	344	212	61.6	123	35.8	9	2.6

This conspicuous lack of eggs is significant in connection with the shortage of milk—the other principal source of phosphorus and adequate proteins—and the limited use of vegetables, fruits, and whole cereals which would be expected to furnish iron in the absence of eggs.

Meat.

A striking feature of the diet schedules was the frequency with which meat appeared even in the poorest kind of diets. (Table 26.) Two-thirds (65.7 per cent) of the entire group of children had meat during the day studied, and 18.7 per cent had it two or three times. This use of meat, in view of the fact that amounts are not known, can not be regarded as excessive save in connection with the omission of other more essential items of the diet—milk in particular. When it is recalled that only 18.9 per cent of the children had the minimum amount of milk daily, that 57.2 per cent had none to drink, and that 16.1 per cent had none at all, even in food, it will be readily agreed that the meat might well have been reduced or omitted entirely and the money spent for it put into milk.

TABLE 26.—*Number of times meat used daily.*[1]

Number of times meat used daily.[1]	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
Having no meat	1,993	33.1
Having meat	3,951	65.7
Once	2,829	47.0
Twice	1,037	17.2
Three times	85	1.4
Not reported	71	1.2

[1] Information relates to day preceding agent's visit.

Meat and milk consumption.—That meat was deemed a more essential or at least a more desirable item of diet than milk is evident from the fact that two-thirds (66.6 per cent) of the children who received less than a pint of milk had meat, and 17.7 per cent of them had it twice or oftener. (Table 27.) Indeed, slightly over two-thirds (67.4 per cent) of the children with no milk at all to drink had meat, and 21.4 per cent of them ate it twice or more times daily. The contrast between meat and milk consumption is even more striking in the group of 970 children which had no milk either as beverage or in food. Even though milk was totally absent from these 970 diets 678, or 69.9 per cent, of them included meat and one-fourth (24.8 per cent) included meat more than once a day. These facts would seem to emphasize the observation made in previous discussions that the failure to use milk is not solely a question of expense—though this is a determining factor—but also one of ignorance of its value in the diet. The amount of money required to purchase meat for one or two servings, even though they were small, would suffice to buy at least a small amount of milk.

TABLE 27.—*Number of times meat used daily,*[1] *by amount of milk used as a beverage.*

Amount of milk used as a beverage.	Children 2 to 7 years of age.										
	Total.	Having no meat in diet.		Having meat in diet specified number of times daily.[1]						Not reported.	
				Total.		Once.		More than once.			
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	1,993	33.1	3,951	65.7	2,829	47.0	1,122	18.7	71	1.2
No milk used as beverage	3,443	1,106	32.1	2,322	67.4	1,584	46.0	738	21.4	15	.4
No milk in food	970	292	30.1	678	69.9	437	45.1	241	24.8	.....	.....
Milk in food	[2]2,473	814	32.9	1,644	66.5	1,147	46.4	497	20.1	15	.6
Less than 1 pint	1,294	431	33.3	862	66.6	633	48.9	229	17.7	1	.1
One pint and over	1,139	427	37.5	711	62.4	568	49.9	143	12.6	1	.1
Not reported	139	29	20.9	56	40.3	44	31.7	12	8.6	54	38.8

[1] Information relates to day preceding agent's visit.
[2] Includes 159 children for whom item was not reported.

Meat is doubtless chosen instead of milk because it is regarded as a food and milk merely as a beverage, and likewise because of its palatability. Children, moreover, who are allowed what meat they want are likely to refuse milk as less attractive food.

Meat and grade of diet.—It is significant that meat appears to have made little difference in the diet grade. Except for the class E diets, which were almost entirely carbohydrate, and only 4.8 per cent of which contained meat, the use of meat was approximately the same, not far from two-thirds of the children in each of the other four groups having had meat on the day studied. (Table 28.) However, it is interesting to note, while no children with A diets had meat twice a day, 20.5 per cent of all diets classed as D contained meat two or more times a day, and it is further worthy of comment that two-thirds of all the children who had meat more than once daily were in the D or inadequate diet group not because of the presence of the meat, to be sure, but in spite of it. This bears evidence to the fact that meat alone can not save a diet from inadequacy no matter how much nor how frequently it is used.

TABLE 28.—*Number of times meat used daily,*[1] *by grade of diet.*

Grade of diet.	Children 2 to 7 years of age.											
	Total.	Having no meat in diet.		Having meat specified number of times daily.[1]						Not reported.	
				Total.		Once.		More than once.			
		Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]
Total	6,015	1,993	33.1	3,951	65.7	2,829	47.0	1,122	18.7	71	1.2
A	25	8	.....	17	.....	17	.....	.....	.....	.....	.....
B	509	111	21.8	398	78.2	313	61.5	85	16.7	.....	.....
C	1,757	563	32.0	1,192	67.8	881	50.1	311	17.7	2	.1
D	3,514	1,185	33.7	2,327	66.2	1,605	45.7	722	20.5	2	.1
E	125	119	95.2	6	4.8	6	4.8	.....	.....	.....	.....
Not reported	85	7	.....	11	.....	7	.....	4	.....	67	.....

[1] Information relates to day preceding agent's visit.
[2] Not shown where base is less than 100.

Use of meat and nationality.—It has been shown that an average of two-thirds of the diets studied contained meat. The prevalence of meat eating among the different nationality groups may be observed in Table 29. A glance at the two columns "per cent having no meat," and "per cent having meat," gives no impression of any striking national differences in the use of meat such as are commonly assumed to exist. Nevertheless if these nationality groups are arranged in order of decreasing use of meat, as shown in Table 30, fairly wide differences between the highest and the lowest in the list are apparent.

TABLE 29.—*Number of times meat used daily,*[1] *by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.										
	Total.	Having no meat in diet.		Having meat specified number of times daily.[1]						Not reported.	
				Total.		Once.		More than once.			
		Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.
Total	6,015	1,993	33.1	3,951	65.7	2,829	47.0	1,122	18.7	71	1.2
White	5,777	1,910	33.1	3,801	65.8	2,736	47.4	1,065	18.4	66	1.1
Native	1,843	527	28.6	1,285	69.7	981	53.2	304	16.5	31	1.7
Foreign-born	3,934	1,383	35.2	2,516	64.0	1,755	44.6	761	19.3	35	.9
Polish	923	368	39.9	546	59.2	420	45.5	126	13.7	9	1.0
Serbo-Croatian	587	256	43.6	327	55.7	235	40.0	92	15.7	4	.7
Slovak	546	183	33.5	362	66.3	250	45.8	112	20.5	1	.2
Magyar	291	71	24.4	218	74.9	140	48.1	78	26.8	2	.7
Italian	265	108	40.8	151	57.0	107	40.4	44	16.6	6	2.3
German	228	67	29.4	159	69.7	110	48.2	49	21.5	2	.9
Lithuanian	225	48	21.3	173	76.9	108	48.0	65	28.9	4	1.8
All other	869	282	32.5	580	66.7	385	44.3	195	22.4	7	.8
Negro	232	82	35.3	145	62.5	89	38.4	56	24.1	5	2.2
Not reported	6	1	.....	5	.....	4	.....	1	.....	.....	.....

[1] Information relates to day preceding agent's visit.
[2] Not shown where base is less than 100.

TABLE 30.—*Use of meat by nationality of mother.*

Nationality of mother.	Per cent of children having meat.	Per cent of children having meat two or more times.	Per cent of children having no meat.
Above average:			
Lithuanian	76.9	28.9	21.3
Magyar	74.9	26.8	24.4
Average:			
German	69.7	21.5	29.4
Native white	69.7	16.5	28.6
Slovak	66.3	20.5	33.5
Negro	62.5	24.1	35.3
Below average:			
Polish	59.2	13.7	39.9
Italian	57.0	16.6	40.8
Serbo-Croatian	55.7	15.7	43.6

About three-fourths of the children of Lithuanian and Magyar parentage, two-thirds of those of German, native white, Slovak, and Negro parentage, and more than half of those of Polish, Italian and Serbo-Croatian parentage had meat during the day. The variation in the proportion having meat twice or oftener daily corresponds roughly with that in the proportion having meat at least once—the group containing the most meat users having also the highest percentage with meat more than once; and the group having the least containing similarly the smallest number using it two or more times.

It is interesting to note that the Italians and the Poles, the former frequently credited with being light and the latter with being heavy users of meat, are in the same group. This report, it must be borne in mind, deals only with meat eating among the young children and does not give any record of amounts eaten. Conclusions contrary to the general belief concerning quantities of meat eaten or its consumption by adults of these nationalities can not, therefore, be assumed from these findings.

Use of meat and income.—That the use of meat is determined to only an inconsiderable extent by economic status is apparent from Table 31. It may be remarked that not only did two-thirds of all the children have meat on the day of the study but the average for the several earnings groups varied but slightly. With an income under $850 a family would unquestionably be better nourished if meat were foregone entirely and the money put into more essential foods. Yet 61.1 per cent of the children in this earnings group had meat, and 17.2 per cent had it two or more times—a record but little under that of the children in the highest income group, of whom 68.5 per cent had meat and 16.3 per cent had it twice or oftener.

TABLE 31.—*Number of times meat used daily,*[1] *by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.										
	Total.	Having no meat in diet.		Having meat specified number of times daily.[1]						Not reported.	
				Total.		Once.		More than once.			
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	1,993	33.1	3,951	65.7	2,829	47.0	1,122	18.6	71	1.2
Under $850	851	316	37.1	520	61.1	374	43.9	146	17.2	15	1.8
$850 to $1,049	923	334	36.2	582	63.1	401	43.4	181	19.6	7	.8
$1,050 to $1,249	1,065	357	33.5	696	65.4	496	46.6	200	18.8	12	1.1
$1,250 to $1,449	843	264	31.3	572	67.9	389	46.1	183	21.7	7	.8
$1,450 to $1,849	1,041	304	29.2	724	69.5	531	51.0	193	18.5	13	1.2
$1,850 to $2,249	378	105	27.8	271	71.7	196	51.9	75	19.8	2	.5
$2,250 and over	441	134	30.4	302	68.5	230	52.2	72	16.3	5	1.1
No chief breadwinner and no earnings	129	60	46.5	68	52.7	52	40.3	16	12.4	1	.8
Not reported	344	119	34.6	216	62.8	160	46.5	56	16.3	9	2.6

[1] Information relates to day preceding agent's visit.

The most outstanding feature of the meat situation as revealed by the foregoing discussion is the uniformly large proportion of the children studied who were receiving meat. Regardless of financial status, of the nationality of the mother, of the presence or absence of milk, or of the adequacy or inadequacy of the diet as a whole, about two-thirds of all the children were receiving meat once or oftener daily. Meat was evidently the one food which was deemed most essential or most desirable by a considerable majority of the families in the group studied, and was purchased and eaten whatever else had to be foregone.

Items of diet lacking.

The use of each of the seven foods which are the foundation of a child's diet—milk, eggs, cereal, vegetables, fruits, potatoes, and meat—has been considered separately. In most instances large percentages of children have been without the particular item of diet in question. The query naturally arises: To what extent are these seven foods, considered together, absent from the individual dietaries? Table 32 gives the number of children lacking one, two, three, or more of these items of diet, up to and including the entire seven. The table does not, however, show what particular combinations of foods are missing.

TABLE 32.—*Number of items lacking in diet.*

Number of items lacking in diet.	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
No items lacking	97	1.6
Less than 4	3,113	51.8
1	475	7.9
2	1,071	17.8
3	1,567	26.1
4 and over	2,735	45.5
4	1,460	24.3
5	889	14.8
6	338	5.6
7	48	.8
Not reported	70	1.2

According to this table 97 children, or 1.6 per cent of the total number, lacked none of these seven articles of diet; 7.9 per cent lacked but one; 17.8 per cent, two; and 26.1 per cent, three. Up to this number the omissions may conceivably have been such as not seriously to affect the diet—as, for example, meat, eggs, and cereal, the absence of which would still leave an adequate diet if sufficient milk were used. But if milk, vegetables, and fruits were the three left out, or if milk alone were missing, it would be a serious matter.

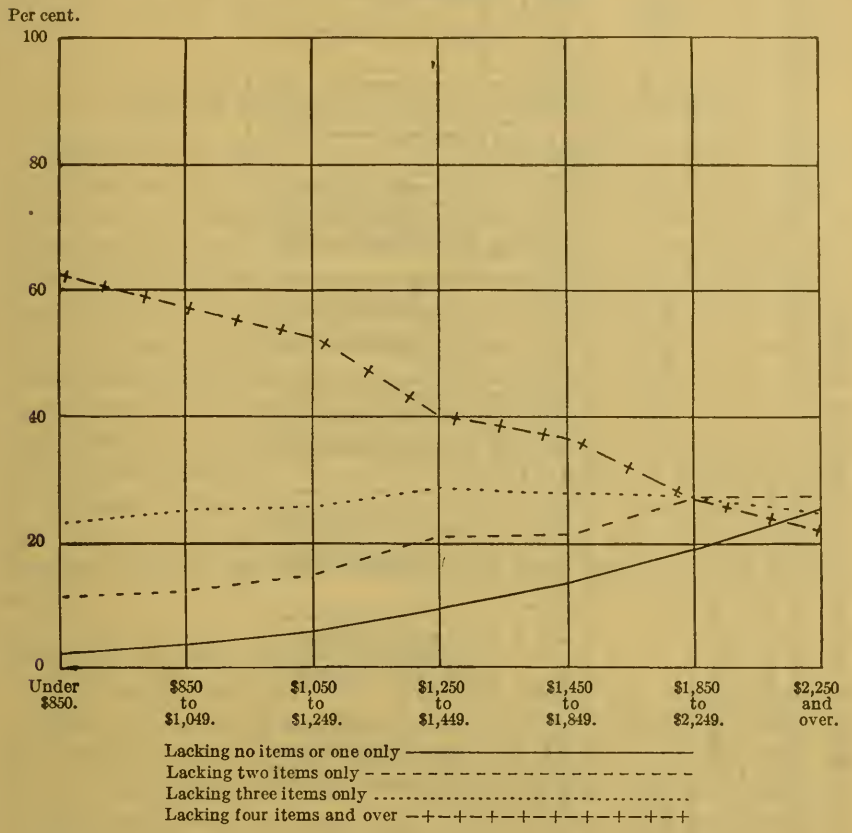
It is highly improbable that any diet lacking four or more of these foods would be satisfactory. Nevertheless, nearly half (45.5 per cent) of the children lacked four of the specified items, 5.6 per cent lacked as many as six items, and 48 children did not have a single one of the seven.

With all seven items missing little remains but bread, coffee, spaghetti, and sweets; and any diet composed of these foods alone would, of course, be hopelessly inadequate.

Income and absence of specified items.—One naturally turns to the income for an explanation of these omissions, and Chart VII shows that this expectation is at least partially warranted. The proportion of children who lacked less than four items was low in the lowest income group and increased to a maximum in the highest earnings group; while the proportion of children who lacked four or more items was high in the lower income groups and decreased materially in the higher ones.

Since nearly one-fourth (27 per cent and 22.2 per cent, respectively) of the children in the two highest earnings groups lacked as many as four of these articles of diet, poverty can not justly be made to bear the whole burden of responsibility for such omissions

CHART VII.—Per cent of children 2 to 7 years of age lacking specified number of items in diet, by earnings of chief breadwinner.



Nationality and absence of specified items.—On the basis of the percentage of children reported as lacking four or more of the specified items of diet the Serbo-Croatians, with 71.4 per cent of their children lacking four or more items, had the poorest record. (Table 33.) The Negroes, with 69 per cent, were not far behind. The Lithuanian, Italian, and Polish groups followed, with 65.8, 63.4, and 60.5 per cent, respectively; and the diets of 53.8 per cent of the children of Slovak mothers and of 47.8 per cent of the children of Magyar mothers were likewise lacking. The children of German mothers (with 31.6 per cent) and those of native white mothers (with 22.7 per cent), as might be expected from their having the best ratings relative to the individual foods, had the best records in this respect.

TABLE 33.—*Number of items lacking in diet, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.																					
	Total.	Lacking specified number of items in diet.																			Not reported.	
		None.		Less than 4.								4 and over.										
				Total.		1		2		3		Total.		4		5		6		7			
		Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	97	1.6	3,113	51.8	475	7.9	1,071	17.8	1,567	26.1	2,735	45.5	1,460	24.3	889	14.8	338	5.6	48	0.8	70	1.2
White	5,777	95	1.6	3,043	52.7	471	8.2	1,050	18.2	1,522	26.3	2,574	44.6	1,386	24.0	833	14.4	310	5.4	45	.8	65	1.1
Native	1,843	72	3.9	1,322	71.7	305	16.5	509	27.6	508	27.6	418	22.7	267	14.5	114	6.2	34	1.8	3	.2	31	1.7
Foreign-born	3,934	23	.6	1,721	43.7	166	4.2	541	13.8	1,014	25.8	2,156	54.8	1,119	28.4	719	18.3	276	7.0	42	1.1	34	.9
Polish	923	.....	.....	356	38.6	17	1.8	91	9.9	248	26.9	558	60.5	284	30.8	190	20.6	72	7.8	12	1.3	9	1.0
Serbo-Croatian	587	1	.2	163	27.8	6	1.0	42	7.2	115	19.6	419	71.4	176	30.0	153	26.1	78	13.3	12	2.0	4	.7
Slovak	546	.....	.....	251	46.0	21	3.8	73	13.4	157	28.8	294	53.8	158	28.9	90	16.5	33	6.0	13	2.4	1	.2
Magyar	291	3	1.0	148	50.9	7	2.4	47	16.2	94	32.3	139	47.8	77	26.5	42	14.4	19	6.5	1	.3	1	.3
Italian	265	.....	.....	91	34.3	3	1.1	35	13.2	53	20.0	168	63.4	97	36.6	59	22.3	10	3.8	2	.8	6	2.3
German	228	7	3.1	147	64.5	24	10.5	54	23.7	69	30.3	72	31.6	41	18.0	18	7.9	11	4.8	2	.9	2	.9
Lithuanian	225	.....	.....	73	32.4	7	3.1	18	8.0	48	21.3	148	65.8	70	31.1	57	25.3	21	9.3	.....	.....	4	1.8
All other	869	12	1.4	492	56.6	81	9.3	181	20.8	230	26.5	358	41.2	216	24.9	110	12.7	32	3.7	.....	.....	7	.8
Negro	232	2	.8	65	28.0	3	1.3	17	7.3	45	19.4	160	69.0	73	31.5	56	24.1	28	12.1	3	1.3	5	2.2
Not reported	6	.....	.....	5	.....	1	.....	4	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

CUSTOMS REGARDING CERTAIN DIETARY PRACTICES.

Although the chief concern in feeding children should be the provision of such foods as will supply all the needed nutritive materials, the technique of feeding is important if full success—or often any success at all—in feeding children is to be attained. Not only the foods given, therefore, but the suitability of those foods to the digestive tract of the child, the number of meals a day in which they are eaten, the regularity of hours, whether or not foods are allowed between meals, and the character of each meal must also be considered. A diet may contain everything necessary for good nutrition and yet fail to produce a well-nourished child, because of unfavorable practices in respect to one or more of the conditions mentioned. The significance of each of these conditions to the well-being of the child, and the custom of the children studied in respect to each, therefore form an important part of this dietary study.

Suitability of foods to age of children.

It is usually assumed that a healthy adult can eat and digest practically any food, raw or cooked, and his dietary, therefore, is allowed to include a great variety of food prepared in many different ways. Whether or not this is a wise practice may well be questioned; such a procedure can not be followed in feeding young children without unfavorable results. The digestive tract of the child is not fully developed and is not equal to the task of digesting many foods which would be entirely wholesome for an adult. In feeding children, therefore, only simple, easily digested foods should be given in the earlier years; other foods may be very gradually introduced as the digestive tract becomes more able to care for them. For this reason pies, rich pastries, fried foods, and other foods difficult of digestion are excluded from dietaries planned for children of preschool age.

That little or no consideration was given to the suitability of food to the digestive tract of the child was one of the facts most apparent in the present study of Gary children. (Table 34.) Only 3.4 per cent of all the children's diets, in fact, bore evidence that they were planned with the age of the child in mind. These consisted of milk, cereals, and simply cooked foods—potatoes, meat, vegetables, and fruits—and instead of pie they included fruits or simple puddings.

It was plainly evident from most of the schedules that the meals were prepared for the father and that all the family from the 2-year-

old up ate the same meal. It was not uncommon to find the day's diet for a 2- or 3-year-old child similar to the following:

Breakfast: Ham and eggs, fried potatoes, coffee.

Dinner: Baked beans, catsup, bread, coffee.

Supper: Roast pork, potatoes browned in pork fat, gravy, fried onions, apple pie, cheese and coffee.

The diets of more than 18 per cent of the children were of this general type, though not always so extreme as this one. Such a diet might perhaps be suited to the digestive capacity of a miner or lumberman but is utterly unsuited to the delicate digestive organs of a 6-year-old child, much less those of a 2-year-old.

There was distinctly more favorable feeding in respect to suitability of foods among the native groups than among the colored and the foreign born. Of the children of native mothers 8.8 per cent had diets which appeared to be planned for children (the average for all nationality groups was 3.4 per cent) while only 1.1 per cent of the children of the foreign born and but 0.4 per cent of the colored children had such diets. Among the Lithuanians, Magyars, and Italians not a single child had a diet suited to his age, and but 1 child of a Polish mother, 2 of German mothers, and 5 of Serbo-Croatian mothers were thus favored.

TABLE 34.—*Type of meals, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.								
	Total.	Type of meals.							
		Suitable.		Unsuitable.		Indeterminate.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	207	3.4	1,101	18.3	4,641	77.2	66	1.1
White	5,777	205	3.5	1,038	18.0	4,473	77.4	61	1.1
Native	1,843	163	8.8	371	20.1	1,280	69.5	29	1.6
Foreign-born	3,934	42	1.1	667	17.0	3,193	81.2	32	.8
Polish	923	1	.1	136	14.7	778	84.3	8	.9
Serbo-Croatian	587	5	.9	79	13.5	500	85.2	3	.5
Slovak	546	1	.2	92	16.8	452	82.8	1	.2
Magyar	291	.....	.....	72	24.7	217	74.6	2	.7
Italian	265	.....	.....	64	24.2	195	73.6	6	2.3
German	228	2	.9	50	21.9	173	75.9	3	1.3
Lithuanian	225	.....	.....	31	13.8	190	84.4	4	1.8
All other	869	33	3.8	143	16.5	688	79.2	5	.6
Negro	232	1	.4	63	27.2	163	70.3	5	2.2
Not reported	6	1	.....	.....	.....	5	.....	.....	.....

[1] Not shown where base is less than 100.

Type of evening meal.—It is usually considered wise to have the young child's evening meal, especially, an easily digested one, for his bedtime should come shortly thereafter and such a meal is more conducive to a comfortable night's rest. Hence the custom of having the dinner at noon and having a supper of cereal, milk, bread,

and fruit; baked potato, soft egg, bread, and milk; or some other equally simple combination.

As a fact, more than 60 per cent of the children studied had evening meals which—to use the popular terminology—were distinctly "heavy," i. e., were of a type similiar to the one already referred to and not conducive to either ease or quickness of digestion. (Table 35.) Only 9.1 per cent of the children, on the other hand, had evening meals which were suitably simple, though 13.7 per cent more, who had their dinners at night, might be classed in this group since their evening meals could not be called "heavy." Even if these are included, a total of less than one-fourth of the children (22.8 per cent) had simple evening meals of the desired type.

TABLE 35.—*Type of evening meal.*

Type of evening meal.	Children 2 to 7 years of age.	
	Number.	Per cent distribution.
Total	6,015	100.0
Heavy	3,655	60.8
Principal meal but not heavy	826	13.7
Light	545	9.1
Not reported, and no evening meal	989	16.4

Number and regularity of meals.—Most of the children studied (95.9 per cent) had three meals a day. (Table 36.) Some children however, 126, had but two meals a day, 67 had four meals or more, and 7 children had but one. The number of meals bears little relation to the age of the child, though a slightly higher proportion of 2- and 3-year-old children than of the older groups had four meals.

TABLE 36.—*Number of meals daily,*[1] *by age of child.*

Age of child.	Children 2 to 7 years of age.									
	Total.	Number of meals daily.[1]								
		1		2		3		4 and over.		Not reported.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[2]	Number.	Per cent.	Number.	Per cent.
Total	6,015	7	0.1	126	2.1	5,770	95.9	67	1.1	45	0.7
2 years, under 3	1,079	2	.2	26	2.4	1,031	95.6	17	1.6	3	.3
3 years, under 4	1,437	2	.1	36	2.5	1,367	95.1	24	1.7	8	.6
4 years, under 5	1,233	.....	.....	23	1.9	1,192	96.7	8	.6	10	.8
5 years, under 6	1,100	1	.1	19	1.7	1,055	95.9	11	1.0	7	.7
6 years, under 7	1,008	2	.2	19	1.9	973	96.5	7	.7	7	.7
7 years, under 8	156	.....	.....	3	1.9	150	96.2	.....	.....	3	1.9
Not reported	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....

[1] Information relates to day preceding agent's visit. [2] Not shown where base is less than 100.

Whether a child has three or four meals is a matter of less concern than is the regularity of his meals. All pediatrists emphasize the importance of having the meals of young children at unfailingly regular hours. Less than half (47 per cent) of the group studied, however, had regular hours for all three meals, though 43 per cent more had two of their meals at practically the same hours daily. There remain 9.1 per cent of the entire group, who had no regular hours for any of their meals. (Table 37.)

TABLE 37.—*Regularity of meals, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.							
	Total.	Regular hours for all meals.		Regular hours for 1 or 2 meals.		No regular hours.		Not reported.
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	2,830	47.0	2,587	43.0	545	9.1	53	0.9
White	5,777	2,737	47.4	2,476	42.9	516	8.9	48	.8
Native	1,843	1,214	65.9	566	30.7	35	1.9	28	1.5
Foreign-born	3,934	1,523	38.7	1,910	48.6	481	12.2	20	.5
Polish	923	304	32.9	485	52.5	130	14.1	4	.4
Serbo-Croatian	587	171	29.1	334	56.9	78	13.3	4	.7
Slovak	546	186	34.1	273	50.0	87	15.9	.....	.....
Magyar	291	125	43.0	140	48.1	26	8.9	.....	.....
Italian	265	104	39.2	114	43.0	42	15.8	5	1.9
German	228	127	55.7	96	42.1	3	1.3	2	.9
Lithuanian	225	76	33.8	104	46.2	42	18.7	3	1.3
All other	869	430	49.5	364	41.9	73	8.4	2	.2
Negro	232	92	39.7	107	46.1	28	12.1	5	2.2
Not reported	6	1	.....	4	.....	1	.....	.....	.....

[1] Not shown where base is less than 100.

Irregularity was more common among the foreign-born and the colored than among the native white group, approximately 39 per cent of the children having three meals at regular hours and 12.2 per cent having no regular hours for meals in the two former groups, in contrast to 65.9 per cent of the children who had three meals at regular hours and 1.9 per cent who had no regular hours for meals in the native white group. No striking differences were found among the children of the foreign-born groups. The record of the Lithuanians, with but one-third of their children having three meals at regular hours and nearly one-fifth (18.7 per cent) having no regular hours for meals, was one of the poorest. The children of German mothers, in this as in many other items, most closely approached the record of the children of native white mothers.

Eating between meals.—Eating between meals, or "piecing," in this study includes all eating at times other than mealtimes, whether the number of meals is three or four. (A lunch such as bread and milk, taken daily at approximately the same hour, has been considered a meal rather than as eating between meals.) Even with this allow-

TABLE 38.—*Amount and type of food eaten between meals, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.														
	Total.	Eating between meals.										No eating between meals.		Not reported.	
		Total.		Suitable food.				Unsuitable food.							
				Amount limited.		Amount excessive.		Amount limited.		Amount excessive.					
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	4,841	80.5	2,967	49.3	353	5.9	1,294	21.5	227	3.8	1,084	18.0	90	1.5
White	5,777	4,661	80.7	2,869	49.7	337	5.8	1,237	21.4	218	3.8	1,031	17.8	85	1.5
Native	1,843	1,228	66.6	876	47.5	69	3.7	257	13.9	26	1.4	573	31.1	42	2.3
Foreign-born	3,934	3,433	87.3	1,993	50.7	268	6.8	980	24.9	192	4.9	458	11.6	43	1.1
Polish	923	847	91.7	405	43.9	78	8.4	292	31.6	72	7.8	65	7.0	11	1.2
Serbo-Croatian	587	500	85.2	321	54.7	29	4.9	127	21.6	23	3.9	80	13.6	7	1.2
Slovak	546	487	89.2	279	51.1	27	4.9	145	26.6	36	6.6	58	10.6	1	.2
Magyar	291	251	86.2	152	52.2	15	5.2	79	27.1	5	1.7	36	12.4	4	1.4
Italian	265	233	87.9	124	46.8	30	11.3	65	24.5	14	5.3	29	10.9	3	1.1
German	228	184	80.7	138	60.5	11	4.8	30	13.2	5	2.2	41	18.0	3	1.3
Lithuanian	225	207	92.0	117	52.0	15	6.7	70	31.1	5	2.2	15	6.7	3	1.3
All other	869	724	83.3	457	52.6	63	7.3	172	19.8	32	3.7	134	15.4	11	1.3
Negro	232	175	75.4	94	40.5	15	6.5	57	24.6	9	3.9	52	22.4	5	2.2
Not reported	6	5	.....	4	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....

[1] Not shown where base is less than 100.

ance, "piecing" was a common habit among the children, since only 18 per cent of them were reported as not eating between meals. A distinction should doubtless be made between the various types and degrees of piecing. One piece of bread and butter in the morning, for example, is of less importance than many "snacks" of bread eaten at odd times during the day; and a few cents' worth of candy eaten during the afternoon, serious as its effects may be, is of less consequence than candy, fruit, popcorn, nuts, and ice-cream cones indulged in at intervals all day long. Four types of eating between meals, therefore, conforming to these four illustrations, were recognized in classifying the diets. (Table 38.)

About one-half (49.3 per cent) of the children were classed as having moderate amounts of simple foods, such as bread and butter, milk, or fruit; while 5.9 per cent were having only such suitable foods but were having them so frequently or so indiscriminately as to make it appear a decidedly harmful practice. More than a fifth (21.5 per cent) were "piecing" on sweets or other undesirable articles and 3.8 per cent were plainly doing this to excess.

To what extent a small amount of simple food eaten between meals is harmful it is difficult to say. The consensus of opinion among specialists is that no food between meals is the safest rule. Indiscriminate eating of even wholesome foods, and the eating of sweets in particular, is without doubt an injurious practice. Nearly one-third (31.2 per cent) of the children, therefore, who were thus indulging in the "piecing" habit, were doing it probably to their detriment, and 9.6 per cent almost certainly so.

Nationality and eating between meals.—In the matter of "piecing," as in other factors already considered, the children of foreign-born mothers were less fortunate than the children of native white mothers, 31.1 per cent of the latter being free from the habit of eating between meals and only 5.2 per cent indulging in it to excess while only 11.6 per cent of the former did not eat between meals, and 11.7 per cent did it to excess. The children of Lithuanian and Polish mothers, with only 7 per cent free from "piecing," ranked at the bottom of the list; the children of Slovak and Italian mothers, with about 11 per cent free, came next; the children of German mothers, with 18 per cent, and Negro children, with 22.4 per cent not eating between meals, ranked nearest the native white group in freedom from this habit.

Income and eating between meals.—The children in the higher income groups—from the $1,450 level upward—show a slight superiority over those in lower groups in respect to the custom of "piecing," the number free from this habit in the former groups averaging about 23 per cent and in the latter ranging from 17.6 per cent to only 11.9 per cent in families with incomes of less than $850. (Table 39.)

TABLE 39.—*Amount and type of food eaten between meals, by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.														
	Total.	Eating between meals.										No eating between meals.		Not reported.	
		Total.		Suitable food.				Unsuitable food.							
				Amount limited.		Amount excessive.		Amount limited.		Amount excessive.					
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	4,841	80.5	2,967	49.3	353	5.9	1,294	21.5	227	3.8	1,084	18.0	90	1.5
Under $850	851	737	86.6	420	49.4	51	6.0	233	27.4	33	3.9	101	11.9	13	1.5
$850 to $1,049	923	762	82.6	434	47.0	65	7.0	218	23.6	45	4.9	152	16.5	9	1.0
$1,050 to 1,249	1,065	881	82.7	511	48.0	73	6.9	248	23.3	49	4.6	168	15.8	16	1.5
$1,250 to $1,449	843	683	81.0	424	50.3	42	5.0	187	22.2	30	3.6	148	17.6	12	1.4
$1,450 to $1,849	1,041	778	74.7	479	46.0	57	5.5	207	19.9	35	3.4	244	23.4	19	1.8
$1,850 to $2,249	378	287	75.9	198	52.4	23	6.1	50	13.2	16	4.2	88	23.3	3	.8
$2,250 and over	441	337	76.4	252	57.1	15	3.4	62	14.1	8	1.8	97	22.0	7	1.6
No chief breadwinner and no earnings	129	103	79.8	67	51.9	9	7.0	26	20.2	1	.8	23	17.8	3	2.3
Not reported	344	273	79.4	182	52.9	18	5.2	63	18.3	10	2.9	63	18.3	8	2.3

There is nothing about low income itself which would tend toward increased "piecing," unless the more monotonous meals dull the children's appetites at mealtimes and thus favor eating between meals. On the other hand, in families of low income the less ample food supply would seem to limit rather than increase this practice.

Perhaps some other factor associated or coincident with low income, such as greater ignorance of a child's needs and lack of supervision in respect to this habit, produced the poor record for the low income groups. If so, these groups are not proved to be much more ignorant and neglectful in these respects than the highest earnings groups, as the latter had a record only slightly better.

Inadequate breakfasts.

Not only should a young child be assured of sufficient food of the right kind, but this food should be distributed fairly evenly among the three meals, the breakfast and dinner being perhaps heartier than the evening meal. It is important, moreover, that none of these meals be omitted and that the breakfast in particular, following as it does the night abstinence and preceding a day of activity, should be ample. The habit of scanty breakfasts or none at all has in fact been found to be one of the chief factors contributing to malnutrition of children.

Large numbers of the preschool children studied had no breakfast at all or such meager and unsuitable breakfasts as: "One cup of coffee"; "1 cup coffee and 1 piece of apple pie"; "1 cup of coffee and several cookies"; "3 cakes"; or "one egg." It was found that one-third of all the children (32.6 per cent) had no breakfasts or breakfasts of this extremely inadequate type. (Table 40.) The breakfasts of many others were poor or were of questionable adequacy.

Nationality and inadequate breakfasts.—Poorest of the nationalities in respect to breakfasts were the Italians, since three-fifths (60.8 per cent) of their children were having no breakfasts, or only such inadequate ones as those just described. Next in order of inadequacy of breakfasts came the children of Polish, Serbo-Croatian, and Magyar mothers, of whom about half (55.1, 51.8, and 51.2 per cent, respectively) had breakfasts of this extremely poor type or none at all. The smallest proportions without adequate breakfasts were found among the children of German mothers (23.7 per cent), Negro mothers (16.8 per cent), and native white mothers (10.5 per cent).

TABLE 40.—*Inadequate breakfast, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.		
	Total.	Who had very inadequate breakfasts.	
		Number.	Per cent.
Total	6,015	[1] 1,960	32.6
White	5,777	1,921	33.3
Native	1,843	193	10.5
Foreign-born	3,934	1,728	43.9
Polish	923	509	55.1
Serbo-Croatian	587	304	51.8
Slovak	546	236	43.2
Magyar	291	149	51.2
Italian	265	161	60.8
German	228	54	23.7
Lithuanian	225	99	44.0
All other	869	216	24.9
Negro	232	39	16.8
Not reported	6	.....	.....

[1] Includes 12 children who had no breakfast.

Income and inadequate breakfasts.—In common with nearly all the undesirable conditions already discussed, inadequate breakfasts were distinctly more prevalent in the lowest income groups. Table 41 shows that the percentage of children who did not have breakfasts that were at all satisfactory decreased from 44.5 per cent in the families with incomes of less than $850 to but 13.8 per cent in the $2,250 earnings group. But again the fact that so considerable a proportion as 18.8 per cent and 13.8 per cent, respectively, of the children in the two highest income groups did not have adequate breakfasts indicates that some cause other than poverty contributed to the result.

TABLE 41.—*Inadequate breakfast, by earnings of chief breadwinner.*

Earnings of chief breadwinner.	Children 2 to 7 years of age.		
	Total.	Who had very inadequate breakfasts	
		Number.	Per cent.
Total	6,015	[1] 1,960	32.6
Under $850	851	379	44.5
$850 to $1,049	923	395	42.8
$1,050 to $1,249	1,065	388	36.4
$1,250 to $1,449	843	255	30.2
$1,450 to $1,849	1,041	266	25.6
$1,850 to $2,249	378	71	18.8
$2,250 and over	441	61	13.8
No chief breadwinner and no earnings	129	47	36.4
Not reported	344	98	28.5

[1] Includes 12 children who had no breakfast

Inadequate lunches.

Totally insufficient lunches were likewise common among the children studied. As in the case of breakfasts, only the extremely poor lunches were considered "inadequate," in making the tabulations, and the term therefore refers only to such lunches as the following: "One slice bread and coffee"; "cakes, coffee"; "bread and lard, 1 cup coffee"; "2 slices bread and butter, coffee"; "1 plate beef soup"; "2 cobs corn, 1 slice bread and butter"; or "2 slices bread and margarine, 1 dill pickle." Of the children studied, 16.9 per cent had either no lunch at all or one of this inadequate type. Furthermore, 493 children, or 8.2 per cent of the entire group, had neither lunches nor breakfasts of any better type. (Tables 42 and 43.)

The children of native white mothers fared somewhat better than the average, only 6.9 per cent having no lunches, or lunches of this extremely inadequate type, and but 2.3 per cent having neither lunches nor breakfasts of a better type; while the children of foreign-born parentage, of whom 20.2 per cent had inadequate lunches or none and 11 per cent had neither breakfasts nor lunches above the inadequate grade, fared distinctly worse than the average. The children of Polish mothers made the poorest showing; 28.1 per cent of them did not have adequate lunches and 17.2 per cent had neither lunches nor breakfasts that were satisfactory.

TABLE 42.—*Inadequate lunch, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.		
	Total.	Who had very inadequate lunches.	
		Number.	Per cent.
Total	6,015	[1] 1,016	16.9
White	5,777	921	15.9
Native	1,843	127	6.9
Foreign-born	3,934	794	20.2
Polish	923	259	28.1
Serbo-Croatian	587	120	20.4
Slovak	546	148	27.1
Magyar	291	53	18.2
Italian	265	31	11.7
German	228	23	10.1
Lithuanian	225	44	19.6
All other	869	116	13.3
Negro	232	95	40.9
Not reported	6	.....	.....

[1] Includes 88 children who had no lunch.

A combination of inadequate breakfasts and lunches is especially detrimental, for it means that a child must go from supper one night till supper the night following without any real meal. That 8.2 per cent of all the children, 11 per cent of the foreign-born, and 17.2

per cent of the Polish children, were thus receiving but one real meal a day is indeed significant.

TABLE 43.—*Inadequacy of both breakfast and lunch, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.		
	Total.	Both breakfast and lunch inadequate.	
		Number.	Per cent.
Total	6,015	493	8.2
White	5,777	476	8.2
Native	1,843	42	2.3
Foreign-born	3,934	434	11.0
Polish	923	159	17.2
Serbo-Croatian	587	77	13.1
Slovak	546	83	15.2
Magyar	291	26	8.9
Italian	265	24	9.1
German	228	6	2.6
Lithuanian	225	13	5.8
All other	869	46	5.3
Negro	232	17	7.3
Not reported	6	.....	.....

Summary of customs regarding dietary practices.

The findings regarding certain dietary practices which have just been individually considered may be summarized briefly. In the following statement, the condition to be desired is compared with the findings relative to it among the children studied:

It is a matter of common agreement among specialists that it is best for young children—	
(1) To be given simple, easily digested foods suited to their digestive tract.	Only 3.4 per cent of the children, and practically none in the foreign groups, had such meals.
(2) To have as the evening meal, in particular, a light and easily digested one.	Only 22.8 per cent of the children at the most could be said to have had such evening meals, and 60.8 per cent had evening meals of the exactly opposite type.
(3) To have all meals at moderately regular hours.	Less than half (47 per cent) had such regular meals.
(4) To have as many meals as needed but no food between meals.	Only 18 per cent had no food between meals, and 31.2 per cent were quite evidently indulging in "piecing" to a harmful extent.
(5) To have a good breakfast to start the day.	At least one-third had totally inadequate breakfasts, or none.
(6) To have a good lunch at noon.	Sixteen and nine-tenths per cent had distinctly poor lunches or none, and 8.2 per cent had neither adequate lunches nor adequate breakfasts.

These averages, moreover, are for the total group, and the distinctly poorer records of many groups are obscured thereby.

It is obvious that these factors are not all of equal importance. Indeed it is often difficult to convince mothers that they are important at all, since a child may live and apparently thrive in total disregard of all such considerations. Irritability, peevishness, disturbed sleep, digestive difficulties, and the lack of appetite at meal times are results which commonly accompany violations of one or more of these rules; but these are rarely attributed to their real cause. The effects, moreover, are not always immediately visible, but may show cumulatively later on in a poorly nourished body, or a weakened digestive tract. Certain it is, at any rate, that the ideal conditions described above can not be continually disregarded without risk to the present and future well-being of the child.

DIETARY FINDINGS CONSIDERED IN RELATION TO PHYSICAL CONDITION.

Slightly over half (52 per cent) of the 6,015 preschool children for whom schedules were obtained were given physical examinations. The physical findings are presented fully in a special report.[3] Certain data revealed in these examinations, however, are significant in connection with the dietary findings, and will therefore be discussed briefly in this section. Special relationships which have been deemed worthy of comment are: Diet and dental caries; diet and anemia; diet and postural defect; diet and defective tonsils; and diet and the total number of defects.

In studying these relationships it has been borne in mind that a child's state of nutrition is the result not of his diet at the time, but rather of that which he has had through all his previous years. It is doubtless true, however, that the present diet is more or less indicative of the type which he has formerly received. An exception is found in the case of children who have been breast fed in infancy and have later dropped to an unsatisfactory diet.

State of nutrition as indicated by weight according to height.

The grades of diet are compared in Table 44 with two main groups which are defined in terms of weight according to height. The first group comprises all children of average weight or above, and is subdivided into those whose condition of nutrition was adjudged excellent by the physician who made the physical examination, and the others; the second, which comprises children below average weight for height, is subdivided into those less than 7 per cent below, those between 7 and 10 per cent below, and those 10 per cent or more below average weight for height. For this comparison the diet grades are combined into three groups.

If, as is frequently assumed, weight is an accurate index of nutrition, a close relation might be expected to appear between the weight for height groups and the grade of diet. However, the distribution of the children in these weight groups, as shown by Table 44, seems to bear little relation to their classification according to diet. A slightly larger proportion of children having A and B diets (20.2 per cent) were placed in the group with excellent nutrition than of the children having D and E diets (18.3 per cent).

[3] Rude, Anna E., M. D.: Physical Status of Preschool Children, Gary, Ind., pp. 27–62. U. S. Children's Bureau Publication No. 111. Washington, 1922.

TABLE 44.—*Relation of weight to height, by grade of diet.*

Relation of weight to helght.[1]	Children 2 to 7 years of age given physical examination.								
	Total.		Grade of diet.						
			A and B		C		D and E		Not graded.
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	3,125	100.0	332	100.0	885	100.0	1,555	100.0	353
Average and above	1,319	42.2	135	40.7	380	42.9	676	43.5	128
Excellent nutrition [2]	580	18.6	67	20.2	174	19.7	284	18.3	55
Other	739	23.6	68	20.5	206	23.3	392	25.2	73
Below average	1,806	57.8	197	59.3	505	57.1	879	56.5	225
Less than 7 per cent	1,180	37.8	128	38.6	337	38.1	598	38.5	117
7, but less than 10 per cent	323	10.3	38	11.4	83	9.4	151	9.7	51
10 per cent and over	303	9.7	31	9.3	85	9.6	130	8.4	57

[1] The height and weight table used as standard was that prepared by the Children's Bureau for the weighing and measuring test during the Children's Year campaign, the averages for children aged 6 to 48 months having been taken from the anthropometric table compiled by F. S. Crum and those for children aged 5 to 7 years, inclusive, from Bowditch.

[2] Excellent as judged by the examining physician.

The fact that many of the children on good diets failed to qualify as of excellent nutrition may be explained by the following points: (1) The diets were only qualitatively graded and the amount of food may easily have been under the child's requirement; (2) the factor of suitability and digestibility of foods was largely disregarded in diets graded B, and these diets may easily have failed to nourish the children even though apparently containing all the requisite food elements; and (3) a diet satisfactory in every way may fail to produce a well-nourished individual if toxins from tonsils or other sources, or other physical defects, are present to interfere.

The fact that the groups with diets lacking in one or more of the food essentials—the D and E diets—had nearly the same proportion of children of excellent nutrition as the group with the best diets and no greater a proportion of underweights than that group is more difficult to explain. Three queries in respect to this situation immediately arise: Are the diets typical? Does the diet really matter? Or is the weight to height ratio alone not a sufficient criterion of the condition of nutrition?

The precautions taken to eliminate nontypical diets have already been mentioned. Attention has further been called to the fact that the diets of the day preceding the visit of the agent had a significant relation to nutrition only as they were typical of the diets which the child had been receiving; and to the fact that the influence of good feeding during infancy continues to be seen in the child's condition, especially in the years immediately following that period. Furthermore, variation in the grade of a child's diet from day to day, while tending to lessen any correlation of poor diets with poor nutrition

and other physical conditions, would not entirely eliminate it unless so marked as to make the classification of the diet merely a matter of chance as to the particular day chosen. And as will be seen later, marked correlations with other items of physical condition than weight point to a definite relationship existing between the diet of the day taken in this study and the child's habitual diet.

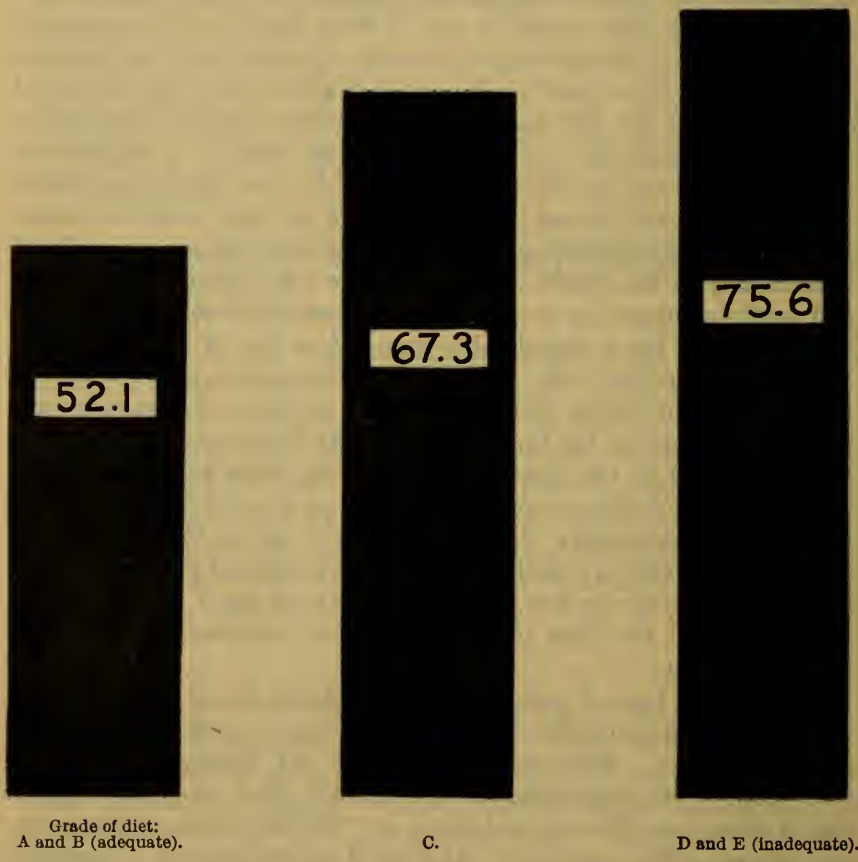
In considering the second query, with reference to the importance of the diets in relation to nutrition, it should be remembered at the outset that the diet grades A and B were based on the apparent ability of diets to provide all the elements essential to good nutrition —calcium for bones and teeth, iron for tissues and the red blood cells, vitamines for the maintenance of health and the prevention of deficiency diseases, as well as proteins capable of supporting normal growth and a sufficient quantity of food to supply the needed energy. It is well known that a shortage of these essentials other than the energy-producing elements does not always show itself immediately in the weight. The body can take calcium from bones and teeth to supply its more vital needs and can lose iron from the red corpuscles, for a considerable time before loss in weight results. Vitamines, moreover, may apparently be stored to some extent in the tissues, and drawn from this source in times of under-supply, making it appear for the time being that the body can thrive without them. Change in the state of nutrition, in other words, lags considerably behind change in the diet. That a certain diet has not yet caused underweight, therefore, does not prove that the diet is satisfactory. This is especially true of the preschool period, particularly the first year or two, since the effects of good infant feeding seem to persist for some time in spite of an extremely undesirable subsequent diet.

A surprising lack of underweight in children living on an almost exclusive bread-and-coffee diet has been noted again and again in preschool clinics. Such children are pale, fat, flabby, and lifeless, with scarcely one characteristic of a normal child excepting weight. One worker has characterized them as "lifeless lumps of lead who stay wherever they are put." And yet if weight alone is a standard of nutrition they must be regarded as in "good" condition.

In view of these facts it can scarcely be considered proved that the diet standards were too high or that diet does not matter, even though children whose dietaries included no apparent source of calcium or vitamines, and insufficient proteins, were found to be of normal weight. Such a diet, if continued many months, can not fail to work havoc in some way, whether or not it causes underweight. It would seem, however, that data as to the discrepancy between diets and weights such as those given in Table 44, secured for more than 3,000 children, would indicate the wisdom of con-

sidering other factors than weight for height in estimating the state of nutrition. It is generally admitted that underweight children are as a rule undernourished; but, unquestionably, many children of average weight and above are also malnourished. Would not an examination of the child's diet be the best method of detecting faulty nutrition in its incipiency?

CHART VIII.—Per cent of children 2 to 7 years of age with carious teeth, by grade of diet.



Carious teeth.

A conspicuous example of the relation between diet and physical condition is shown by Chart VIII, which pictures the relation between the type of diet and the presence of dental caries. Even though neglect to clean the teeth, and other factors which might contribute to decay, were doubtless coexistent with faulty diets, the absence of bone-forming elements in the diets was doubtless an important cause of this condition. Only 52.1 per cent of the children in the highest diet group as compared with 75.6 per cent, or nearly one and one-half times as many, of those in the lowest diet group had decayed teeth. (Table 45.)

TABLE 45.—*Prevalence of carious teeth, by grade of diet and age of child.*

Age of child.	Children 2 to 7 years of age given physical examination.														
	Total.	Having carious teeth.		Grade of diet.											
				A and B.			C.			D and E.			Not graded.		
		Number.	Per cent.	Total.	Having carious teeth.		Total.	Having carious teeth.		Total.	Having carious teeth.		Total.	Having carious teeth.	
					Number.	Per cent.[1]		Number.	Per cent.		Number.	Per cent.		Number.	Per cent.[1]
Total	3,125	2,021	64.7	332	173	52.1	885	596	67.3	1,555	1,175	75.6	353	77	21.8
2 years, under 3	511	108	21.1	39	7	.....	69	14	20.3	76	30	39.5	327	57	17.4
3 years, under 4	496	218	44.0	76	23	30.3	182	81	44.5	234	113	48.3	4	1	.....
4 years, under 5	549	364	66.3	66	34	51.5	192	129	67.2	288	199	69.1	3	2	.....
5 years, under 6	667	533	79.9	65	39	60.0	184	149	81.0	412	340	82.5	6	5	.....
6 years, under 7	682	598	87.7	69	55	79.7	197	168	85.3	408	368	90.2	8	7	.....
7 years, under 8	220	200	90.9	17	15	.....	61	55	90.2	137	125	91.2	5	5	.....

[1] Not shown where base is less than 50.

One of the chief faults of these diets appears to have been lack of calcium due to the small amounts of milk used. The diet grades usually, though not invariably, represented the following amounts of milk: A, 1½ pints; B, 1 pint; C, ½ pint; D, less than ½ pint; E, none or practically none. In view of the importance of calcium in tooth formation the diet grades regarded as milk grades become especially significant. (Table 46.)

TABLE 46.—*Physical defects, by grade of diet.*

Grade of diet.	Children 2 to 7 years of age given physical examination.										
	Total.	Having carious teeth.		Having bony defects of rachitic origin.		Having postural defects.		Having defective tonsils.		Having anemia.	
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]
Total	3,125	2,021	64.7	467	14.9	793	25.4	1,626	52.0	243	7.8
A and B	332	173	52.1	39	11.7	78	23.5	153	46.1	17	5.1
A	19	2	.....	1	.....	3	.....	7	.....	.....	.....
B	313	171	54.6	38	12.1	75	24.0	146	46.6	17	5.4
C	885	596	67.3	106	12.0	220	24.9	489	55.3	66	7.5
D and E	1,555	1,175	75.6	279	17.9	452	29.1	850	54.7	151	9.7
D	1,512	1,141	75.5	272	18.0	435	28.8	824	54.5	147	9.7
E	43	34	.....	7	.....	17	.....	26	.....	4	.....
Not graded	353	77	21.8	43	12.2	43	12.2	134	38.0	9	2.5

[1] Not shown where base is less than 100.

Bony defects of rachitic origin.

Defects of rachitic origin are intimately connected with deficiency in diet and under a proper dietary régime tend to disappear. The relationship between the grade of diet and bony defects of rachitic origin is definitely indicated by Table 46. Of the children with A and B diets, 11.7 per cent had bony defects of rachitic origin as compared with 18 per cent of those with D and E diets. Particularly with reference to the defects here considered, a fact already pointed out [4] must be borne in mind; namely, that a child's nutrition is the product not of his present diet but of that which he has had through all his previous years.

Postural defects.

"Winged shoulders" and other postural defects are common accompaniments of the low muscular tone resulting from poor nutrition. In children of the preschool age, especially during the earlier years, such conditions usually have not become manifest to the same extent as in older children. In the group studied, nevertheless, more than a fourth (25.4 per cent) were found already to have such postural defects. The tendency toward these defects increased with the defectiveness

[4] See p. 101.

of the diet; 29.1 per cent of the children with D and E diets were found to have defects of posture, as compared with 23.5 per cent of those with A and B diets.

Defective tonsils.

It is a matter of general knowledge that enlarged or diseased tonsils, or adenoids—with which they are frequently associated—may markedly affect the physical condition of the child—the enlarged tonsils by obstructing the breathing and the diseased ones by the depressing effect of their toxins. That there may be another relation between abnormal tonsils and poor nutrition, with malnutrition as the cause and abnormal tonsils as the result, has more than once been suggested by pediatrists. In connection with this point it is interesting to note that of the children with A and B diets 46.1 per cent had defective tonsils, as compared with 54.7 per cent of the children with D and E diets. (Table 47.)

That the percentage of defective tonsils is noticeably smaller among the children with A and B diets does not, it is true, necessarily signify a cause and effect relationship, for unfavorable conditions other than deficient diets might also be present. Moreover, the prevalence of abnormal conditions of the tonsils is shown in Table 47 to increase with age, such conditions appearing in 2 per cent of the group under 3 years of age, and 53.5 per cent of the 6- to 7-year age group. Since such a relationship has already been suggested by specialists, however, the data here presented at least offer an argument for further investigation of this point.

TABLE 47.—*Prevalence of defective tonsils, by grade of diet and age of child.*

Age of child.	Children 2 to 7 years of age given physical examination.													
				Grade of diet.										
	Total.	Having defective tonsils.		A and B.			C.			D and E.			Not graded.		
				Total.	Having defective tonsils.		Total.	Having defective tonsils.		Total.	Having defective tonsils.		Total.	Having defective tonsils.	
		Number.	Per cent.		Number.	Per cent.[1]		Number.	Per cent.		Number.	Per cent.		Number.	Per cent.[1]
Total	3,125	1,626	52.0	332	153	46.1	885	489	55.3	1,555	850	54.7	353	134	38.0
2 years, under 3	511	203	39.7	39	15	.....	69	27	39.1	76	38	50.0	327	123	37.6
3 years, under 4	496	254	51.2	76	35	46.1	182	96	52.7	234	120	51.3	4	3	.....
4 years, under 5	549	319	58.1	66	33	50.0	192	110	57.3	288	173	60.1	3	3	.....
5 years, under 6	667	377	56.5	65	31	47.7	184	103	56.0	412	242	58.7	6	1	.....
6 years, under 7	682	365	53.5	69	31	44.9	197	120	60.9	408	210	51.5	8	4	.....
7 years, under 8	220	108	49.1	17	8	.....	61	33	54.1	137	67	48.9	5	.....	.....

[1] Not shown where base is less than 50.

Anemia.

The method of determining anemia—by the inspection of the mucous membranes for pallor—is only a rough one, and the cases singled out in this way are those in which the hemoglobin is considerably reduced. Even so, it was found that 7.8 per cent of the children who received physical examination were anemic. (Table 48, Chart IX.)

CHART IX.—Per cent of children 2 to 7 years of age anemic, by grade of diet.

Grade of diet:
A and B (adequate). C. D and E (inadequate).

Although other factors than diet, such as toxins from tonsils, adenoids, and diseased teeth, are more commonly responsible for anemia than is diet, a diet which does not provide sufficient quantities of iron and other constituents of the red corpuscles is quite capable of producing a secondary anemia. It is therefore of interest to note the incidence of anemia in the different diet groups. In this connection it must be remembered that according to the findings of the physical examinations the percentage of anemic children increased with age, rising to 16.7 per cent in the seventh year.

As is shown in Chart IX, only 5.1 per cent in the highest diet group were anemic, whereas in the lower grades the proportion increased steadily until in the poorest group 9.7 per cent of the children were so classed.

TABLE 48.—*Prevalence of anemia, by grade of diet and age of child.*

Age of child.	Children 2 to 7 years of age given physical examination.														
	Total.	Anemic.		Grade of diet.											
				A and B			C			D and E			Not reported.		
				Total.	Anemic.		Total.	Anemic.		Total.	Anemic.		Total	Anemic.	
		Number.	Per cent.		Number.	Per cent.[1]		Number.	Per cent.		Number.	Per cent.		Number.	Per cent.[1]
Total	3,125	243	7.8	332	17	5.1	885	66	7.5	1,555	151	9.7	353	9	2.5
2 years, under 3	511	5	1.0	39	.....	.....	69	.....	.....	76	1	1.3	327	4	1.2
3 years, under 4	496	3	.6	76	.....	.....	182	.....	.....	234	3	1.3	4	.....	.....
4 years, under 5	549	21	3.8	66	1	1.5	192	5	2.6	288	15	5.2	3	.....	.....
5 years, under 6	667	67	10.0	65	2	3.1	184	25	13.6	412	40	9.7	6	.....	.....
6 years, under 7	682	114	16.7	69	11	15.9	197	30	15.2	408	71	17.4	8	2	.....
7 years, under 8	220	33	15.0	17	3	.....	61	6	9.8	137	21	15.3	5	3	.....

[1] Not shown where base is less than 50.

Number of defects.

One method of comparing the physical condition of a group of children is by the total number of defects which they are individually found to have. Underweight counts as one defect, carious teeth another; and anemia, bad tonsils, a defective heart, and other abnormal conditions are each in turn regarded as one defect. Findings in respect to these defects and their significance are presented in detail in another of the reports on the investigation in Gary.[5] In Table 49 the proportion of children on good diets who were free from defects is compared with that among children who were less satisfactorily fed.

TABLE 49.—*Number of defects, by grade of diet.*

Number of defects.	Children 2 to 7 years of age given physical examination.									
	Total.		With specified grade of diet.							
				B		C		D		
	Number.	Per cent distribution.	A [1]	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	E [1]	Not graded.
Total	3,125	100.0	19	313	100.0	885	100.0	1,512	100.0	43	353
With defects	2,976	95.2	14	287	91.7	846	95.6	1,481	97.9	41	307
Less than 5	1,789	57.2	12	182	58.1	503	56.8	818	54.1	17	257
1	332	10.6	1	49	15.7	83	9.4	108	7.1	2	89
2	440	14.1	4	38	12.1	128	14.5	188	12.4	3	79
3	537	17.2	5	66	21.1	150	16.9	259	17.1	5	52
4	480	15.4	2	29	9.3	142	16.0	263	17.4	7	37
5 to 9	1,123	35.9	2	102	32.6	324	36.6	622	41.1	23	50
5	426	13.6	1	37	11.8	127	14.4	229	15.1	6	26
6	316	10.1	1	36	11.5	86	9.7	174	11.5	6	13
7	196	6.3	.....	14	4.5	65	7.3	108	7.1	5	4
8	123	3.9	.....	9	2.9	25	2.8	80	5.3	5	4
9	62	2.0	.....	6	1.9	21	2.4	31	2.1	1	3
10 to 15	64	2.0	.....	3	1.0	19	2.1	41	2.7	1	.....
10	30	1.0	.....	.....	.....	10	1.1	19	1.3	1	.....
11	21	.7	.....	2	.6	7	.8	12	.8	.....	.....
12	8	.3	.....	.....	.....	2	.2	6	.4	.....	.....
13	3	.1	.....	1	.3	.....	.....	2	.1	.....	.....
14	1	(2)	.....	.....	.....	.....	.....	1	.1	.....	.....
15	1	(2)	.....	.....	.....	.....	.....	1	.1	.....	.....
Without defects	149	4.8	5	26	8.3	39	4.4	31	2.1	2	46

[1] Per cent distribution not shown where base is less than 100.
[2] Less than one-tenth of 1 per cent.

Only 4.8 per cent of the whole group of children examined had no defects at all, while 57.2 per cent had less than 5, 35.9 per cent had from 5 to 9, and 2 per cent had 10 or more defects. In comparison with these average figures the proportions among children on A and B diets were fairly creditable, the percentage free from defects being 9.3—almost twice the average—while 67.8 per cent were found to

[5] Rude, Anna E., M. D.: Physical Status of Preschool Children, Gary, Ind. U. S. Children's Bureau Publication No. 111.

have less than 5. Compared with other diet groups also the children having A and B diets made a distinctly better showing:

	Per cent free from defects.	Per cent with less than 5 defects.
A and B diets	9.3	67.8
C diets	4.4	61.2
D and E diets	2.1	55.8

Over 4 times as high a percentage of the children in the A and B diet group were free from defects as of those in the D and E groups.

The average number of defects, as derived from Table 49, increased from 2.3 for children with A diets, to 3.5 for children with B diets, 4—the same as the average for the entire group—for those with C, 4.4 for those with D, and 4.9 for those with E diets.

Summary of relationship between diet and physical condition.

In interpreting these relationships, it must be borne in mind that the information regarding diet refers to the diets the children were receiving at the time of the study—doubtless more or less typical of their customary diets; and that parallelism does not necessarily prove a cause and effect relationship. So many interdependent factors—numbers of which are not investigated at all—are involved in studies like the present one that caution must be used in explaining such relationships. In this exposition, therefore, it has not been intended to give the impression that diet is the only factor—or in some cases that it is necessarily a factor at all—in the causation of the physical defects discussed. In accordance with the recognized fact that an adequate diet is essential for the nutrition of the body—bones, teeth, blood, muscles, and its every component part—and that good nutrition is an important factor in the prevention of various kinds of bodily defects and disease, this study, involving thousands of cases, has shown that the carefully and adequately fed children were really in the best condition—though other factors than diet may have had a share in making them so.

SUMMARY AND CONCLUSIONS OF DIETARY STUDY.

The diets of 6,015 children of Gary, Ind., between the ages of 2 and 7, inclusive, were studied by the schedule method. These diets were classified into five groups—A, B, C, D, and E—according to their adequacy and suitability for children of these years. A and B diets are those apparently capable of covering the child's actual requirements; A being both adequate and suitable and B adequate, but with one or more flaws in respect to suitability; C is a diet the adequacy of which is questionable; D diets lack one or more of the essentials of nutrition; and E is an almost totally deficient diet. The diet records were likewise examined for the presence or absence of certain foods commonly depended on for a child's diet—milk, eggs, cereals, vegetables, fruits, potatoes—and for the use of coffee. The practices concerning certain customs of eating—regularity of meals, suitability of foods, type of evening meal, "piecing," and adequacy of breakfasts and lunches were also considered. In all instances the relation of the different items to age, nationality, income, and other significant factors was examined. Finally, the relation of certain physical conditions to the grades of diet was studied. The outstanding findings in respect to these different items may be summarized as follows:

Adequacy of diets.

Judged by accepted standards as to what constitutes a diet capable of promoting normal growth and development in children, the large majority of the children studied were not being adequately fed. Less than 10 per cent of the entire group had diets on the day before the agent's visit which appeared adequate (A and B), and only 25 of this group had diets both adequate and suitable. In fact, nearly two-thirds of the total number of children and three-fourths of the children of all nationality groups, save native whites, Germans, and Lithuanians, had diets which were almost certainly lacking in one or more of the essentials.

Milk.

One of the chief factors responsible for so large a percentage of inadequate diets was the scanty use of milk, without which the requirements of the body—for calcium in particular—can not be met. Only 18.9 per cent of all the children were getting the pint which is almost universally recognized as the minimum necessary, and 57.2

per cent had no milk at all to drink. In several nationality groups, indeed, three-fourths of the children had no milk to drink; and 970 children of all groups had no milk at all either in food or as a beverage.

Coffee.[6]

A second factor contributing to the inadequate character of the diets was the prevalence of the coffee habit among these children. Two-thirds of the entire group were found to drink coffee habitually, and 40 per cent to have it more than once a day. Not only so, but in certain of the groups of foreign-born parentage, coffee was drunk by more than 90 per cent of the children, and three-fourths of the Polish group had it two or more times daily.

Coffee drinking, moreover, appears to have been inversely proportional to the use of milk. Not only do the schedules show about the same percentage of children drinking coffee as of those lacking milk, but a comparison of coffee drinking by milk groups shows the use of coffee to increase markedly as the amount of milk decreases. To leave out milk and substitute coffee plays havoc with any diet, whatever may be its redeeming features.

Other foods.

Milk is not the only desirable food which was little used, since vegetables, fruits, cereals, and eggs were likewise conspicuously lacking. More than half of all the diets lacked each of these important foods, 60.1 per cent being without fruits, 59.5 per cent without eggs, 76.6 per cent without cereals, and 50.4 per cent without vegetables other than potatoes. Potatoes and meat were present in higher percentages of the diets than any other foods, about two-thirds of the total number containing each of these articles of diet. The extensive use of potatoes is one of the most commendable features observed. The extensive use of meat is rather to be regretted, in view of the low incomes of many of the families reached by the study and the absence of more important foods from most of the diets, since when meat is not used the tendency is toward a greater use of more essential foods.

Items lacking.

The extreme poverty of the diets is further shown by the fact that nearly half (45.5 per cent) of them lacked as many as four of the foods usually included in a child's diet to insure that his requirements are met and to provide sufficient variety—milk, eggs, vegetables, potatoes, fruit, cereal, and meat. In five of the nine nationality groups, moreover, about two-thirds of the children were without four or more of these foods—69 per cent of the children of colored mothers lacking this number.

[6] "Coffee," throughout this discussion, indicates both coffee and tea.

Technique of feeding.

Not only were a high percentage of the diets studied of doubtful adequacy, but they were likewise faulty in respect to practices which may be included under the term technique of feeding. Only 3.4 per cent of all the children, and practically none of the children of foreign-born mothers, had meals which were suitable to children of their age, and 18.3 per cent of all had meals which were extremely unsuitable in character. The evening meal of 61 per cent of the children was a "heavy" one; less than half of the entire group (47 per cent) had meals at regular hours; and eating between meals was almost a universal practice, only 18 per cent of all the children—and in most of the foreign groups less than this percentage—being free from the habit.

One-third of all the children and almost two-thirds of the children of Italian mothers had breakfasts of an extremely inadequate type such as "one cup of coffee," or "bread and coffee," or "cakes," or no breakfasts. Lunches of a similar type, or no lunches, were reported for 16.9 per cent of all the children, 28.1 per cent of the children of Polish mothers, and 40.9 per cent of the children of Negro mothers. Furthermore, 8.2 per cent of all the children, 11 per cent of those of foreign-born mothers, and 17.2 per cent of those of Polish mothers, had neither breakfasts nor lunches that could be considered at all adequate.

Diet and physical condition.

The percentage of children with no defects was over four times as high in the A and B as in the D and E diet groups. The average number of defects per child increased from 2.3 among children with A diets to 4.9 among those with E diets. The proportion having certain defects closely related to nutrition increased from 5.1 per cent in the A and B grades to 9.7 per cent in the D and E grades in the case of anemia; from 46.1 per cent in the A and B grades to 56.2 per cent in the D and E grades in the case of defective tonsils; from 23.5 per cent to 29.1 per cent for postural defects; from 11.7 per cent to 17.9 per cent for bony defects of rachitic origin; and from 52.1 per cent to 75.6 per cent in the case of carious teeth. On the other hand, little correlation was found between weight for height and grade of diet.

Although children living on diets lacking in elements known to be essential to their normal development appeared to thrive when judged solely by the standard of weight for height, it does not seem safe to conclude that these diets are therefore satisfactory; for the effects of a faulty diet may not be immediately apparent, and may not be reflected in the weight. At any rate the best-fed children in this study were the best ones physically, measured by standards other than weight, and this relationship was most strikingly true in

respect to teeth. It seems to be an argument for considering other factors than weight alone in judging the nutrition of a child.

It is difficult to determine to what extent these better physical conditions in the better diet grades are due to diet, for it is recognized that other factors doubtless play a part in producing them. But since the most notable deficiency appeared to be the lack of calcium, traceable to the small amounts or total absence of milk, it seems reasonable to conclude that the differences in the proportion of children with defects in the good and the poor diet groups is due in part at least to dietary deficiencies.

Nationality.

The relation of nationality to the items of diet which have been severally discussed is one of the most significant observations of this report and may profitably be summarized here. In order to make comparisons among the different nationalities easily possible, Table 50, showing the ranking of the nationalities in respect to these items, has been compiled. In the case of meat, eggs, milk, cereal, fruit, vegetables, and potatoes, and in the grade of diet, the rank is in order of decreasing use of the foods and decreasing adequacy of diets; in the case of coffee, in order of increasing use. For the other features—eating between meals, inadequacy of breakfasts and of lunches, regularity of meals, and lack of four or more specified articles of food—rank is in the order of the more favorable. Statements showing the percentages of children in each nationality group (1) whose chief breadwinners were earning less than $1,250, (2) whose mothers were unable to speak English, and (3) whose mothers were unable to read or write in any language, have also been included for purposes of comparison.

The children of native white mothers, it will be noted, rank first in respect to family income, and in the proportion of literate mothers. The diets of these children, likewise, are all above the average, being first in every column except those for coffee, meat, and fruits, and having a favorable position in these. Although better than the others in most respects, the record of this group is not one of which to boast. The proportion of the children included in it who lacked fruits, vegetables, milk, or eggs, and who had inadequate diets, was in each case more than half; close to two-thirds were without cereal; about the same proportion ate between meals; more than one-third were in the coffee-drinking group; and almost one-fourth lacked four or more of the specified items of diet.

TABLE 50.—*Relative rank of the different nationality groups in the proportions of children having or lacking specified items of diet or falling in certain specified classes.*

Color and nationality of mother.	Per cent of children 2 to 7 years of age having on selected day—													
	No milk as beverage.		1 pint of milk and over.		No eggs.		No potatoes.		No other vegetables.		No fruit.		No cereal.	
	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.
Total	....	57.2	....	18.9	....	59.5	....	36.1	....	50.4	....	60.1	....	76.6
Native white	1	46.9	1	27.9	1	48.1	1	16.0	5	44.2	1	43.5	1	62.0
Foreign-born white	....	61.6	....	14.8	....	63.8	....	44.3	....	53.7	....	67.6	....	83.0
Polish	6	64.5	7	12.4	9	75.4	5	43.0	8	59.2	7	70.1	5	82.8
Serbo-Croatian	5	59.8	4	16.7	5	63.9	9	56.0	9	61.8	10	79.7	9	90.8
Slovak	9	73.6	8	9.0	8	68.3	4	39.4	6	51.6	9	75.8	4	78.9
Magyar	8	70.8	9	8.2	4	63.2	7	52.9	1	38.8	6	67.4	7	86.3
Italian	10	75.1	10	6.8	7	67.9	10	60.4	2	41.5	4	60.0	8	89.4
German	3	51.8	2	26.3	2	48.7	2	29.4	3	42.1	2	52.2	2	76.8
Lithuanian	4	57.3	6	13.3	6	66.7	6	46.2	10	64.0	8	74.2	10	92.0
All other	2	48.8	3	22.0	3	50.5	3	36.6	7	52.8	3	56.2	3	76.9
Negro	7	65.5	5	15.9	10	77.2	8	56.0	4	43.5	5	66.4	6	84.5

Color and nationality of mother.	Per cent of children 2 to 7 years of age having on selected day—						
	No meat.		Meat.	Meat twice and three times.	Tea or coffee.		Tea or coffee twice and over.
	Rank.	Per cent.			Rank.	Per cent.	
Total	.....	33.1	65.7	18.7	.....	66.8	39.9
Native white	3	28.6	69.7	16.5	2	35.2	15.2
Foreign-born white	.....	35.2	64.0	19.3	.....	83.8	53.5
Polish	8	39.9	59.2	13.7	8	91.2	76.2
Serbo-Croatian	10	43.6	55.7	15.7	7	87.4	53.7
Slovak	6	33.5	66.3	20.5	10	94.3	70.3
Magyar	5	24.4	74.9	26.8	9	92.4	55.0
Italian	9	40.8	57.0	16.6	6	85.3	18.1
German	4	29.4	69.7	21.5	4	68.4	24.1
Lithuanian	1	21.3	76.9	28.9	5	84.9	57.8
All other	5	32.5	66.7	22.4	3	67.2	35.8
Negro	7	35.3	62.5	24.1	1	31.0	6.9

Color and nationality of mother.	Per cent of children 2 to 7 years of age.													
	Lacking 4 or more items in diet.		With D and E diet grades.		With A and B diet grades.		With regular meals.		Eating between meals.		With inadequate breakfast.[1]		With inadequate lunch.[2]	
	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.
Total	....	45.5	....	60.5	....	8.9	....	47.0	....	80.5	....	32.6	....	16.9
Native white	1	22.7	1	42.5	1	19.2	1	65.9	1	66.6	1	10.5	1	6.9
Foreign-born white	....	54.8	....	68.3	....	4.3	....	38.7	....	87.3	....	43.9	....	20.2
Polish	6	60.5	7	75.6	9	1.1	9	32.9	9	91.7	9	55.1	9	28.1
Serbo-Croatian	10	71.4	5	72.4	5	2.4	10	29.1	5	85.2	8	51.8	7	20.4
Slovak	5	53.8	9	76.7	6	2.2	7	34.1	8	89.2	5	43.2	8	27.1
Magyar	4	47.8	8	75.9	7	2.1	4	43.0	6	86.2	7	51.2	5	18.2
Italian	7	63.4	10	77.0	8	1.5	6	39.2	7	87.9	10	60.8	3	11.7
German	2	31.6	3	57.0	2	11.4	2	55.7	3	80.7	3	23.7	2	10.1
Lithuanian	8	65.8	4	62.7	10	.9	8	33.8	10	92.0	6	44.0	6	19.6
All other	3	41.2	2	51.6	3	10.8	3	49.5	4	83.3	4	24.9	4	13.3
Negro	9	69.0	6	72.4	4	4.3	5	39.7	2	75.4	2	16.8	10	40.9

[1] Includes children with no breakfast.

[2] Includes children with no lunch.

TABLE 50.—*Relative rank of the different nationality groups in the proportions of children having or lacking specified items of diet or falling in certain specified classes*—Con.

Color and nationality of mother.	Per cent of children 2 to 7 years of age.					
	In families with earnings of chief breadwinner under $1,250.		With mother unable to speak English.		With mother unable to read and write.	
	Rank.	Per cent.	Rank.	Per cent.	Rank.	Per cent.
Total	.....	47.1	.....	36.6	.....	23.3
Native white	1	26.9	2	.2	1	.5
Foreign-born white	.....	55.3	.....	55.9	.....	35.0
Polish	8	62.6	10	80.0	7	40.6
Serbo-Croatian	5	54.7	9	70.7	9	55.4
Slovak	9	64.3	6	48.7	5	23.8
Magyar	4	52.6	4	34.7	4	10.7
Italian	6	58.9	7	62.3	8	45.7
German	2	37.7	3	11.0	2	5.7
Lithuanian	7	60.0	8	65.8	10	67.1
All other	3	45.7	5	39.1	6	26.7
Negro	10	71.6	1	.....	3	6.0

The children of German mothers rank second to those of native white mothers in respect to maternal literacy and earnings of chief breadwinner, and are, correspondingly, next to them in rank in most of the other columns. Neither the children of native white nor those of German parentage, however, rank so much better than the others as the economic status, greater percentage of literacy, and other advantages of these groups would lead one to expect.

At the other extreme of the earnings scale were the colored families. Since in the homes of 71.6 per cent the income was under $1,250, it is not surprising to find about three-fourths of the colored children without eggs, milk, or cereals, and having inadequate diets; about two-thirds without milk or fruits; and more than two-fifths without vegetables other than potatoes. In contrast, two-thirds of this group had meat and a fourth of them had it more than once a day. In view of the low income and the absence of milk and other essential foods, this use of meat must be regarded as of doubtful advantage. The most commendable feature of the diets of these children was the fact that less than one-third of them drank coffee. This was the best coffee record among all the race and nationality groups.

The highest percentage of inadequate diets as well as of extremely inadequate breakfasts was found among the children of Italian mothers; the milk record of this nationality was also the poorest, 75.1 per cent of the children receiving none to drink and only 6.8 per cent having so much as a pint. The record of the children of this group was likewise among the poorest in reference to most other items, since approximately 85.3 per cent drank coffee, had no cereal, and ate between meals, about two-thirds were without eggs, and the same proportion lacked four or more of the specified items.

Worthy of remark in respect to the Italians is their high rank in the use of vegetables and fruits, and low rank in the use of meat. Their use of vegetables exceeded that of all nationalities save the Magyars, not even excepting the native whites, and their use of fruits that of all save the native whites and the Germans. Even so, their record is not remarkably high; for 41.5 per cent of the children had no vegetables other than potatoes, and 60 per cent, no fruits.

When it is observed that the mothers of nearly half the children of this group were illiterate, that the mothers of almost two-thirds were unable even to speak English, and that the chief breadwinners' earnings in the families in which 58.9 per cent of them lived were under $1,250, the low rating of the children of Italian parentage is more readily understood.

In every item save cereal and potatoes the children of Polish mothers were below the average of the foreign born. Particularly to be remarked were their excessive use of coffee, 91.2 per cent drinking it and 76.2 per cent having it two or more times a day; their high percentages of inadequate breakfasts (55.1 per cent) and lunches (28.1 per cent); their almost universal custom of "piecing" (91.7 per cent); their meager use of milk (64.5 per cent having none), fruits (70.1 per cent having none), eggs (75.4 per cent having none), and vegetables (59.2 per cent having none other than potatoes); and their general use of meat (only 39.9 per cent having none). The diet of bread, coffee, and meat commonly credited to this nationality seems to have been generally characteristic of this group. That 62.6 per cent of these children were in income groups under $1,250, and that the mothers of 40.6 per cent were illiterate and those of 80 per cent unable to speak English, are facts worthy of consideration in connection with these deficiencies of diet.

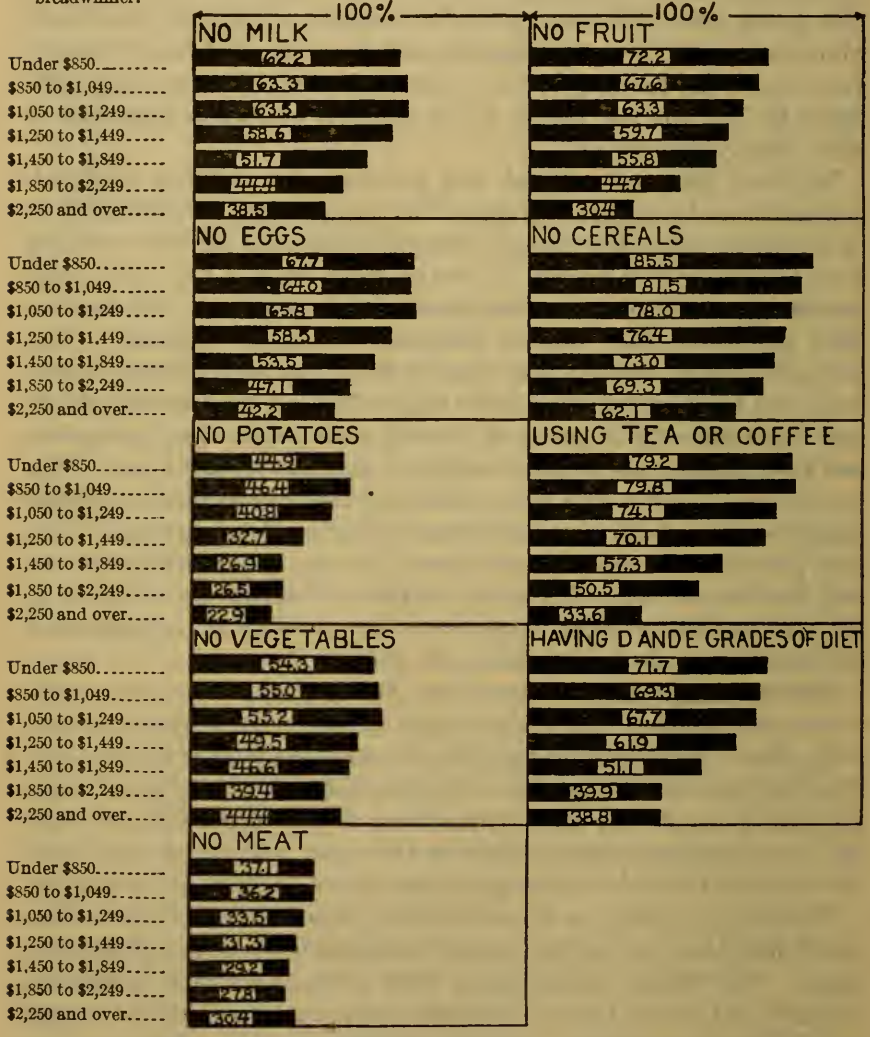
Not strikingly different from the Polish group were the Serbo-Croatians, Slovaks, and Lithuanians; in the large majority of the items these four groups occupy places among the four or five poorest. The Lithuanians rank poorest for eating between meals, use of vegetables and cereal, and literacy, and rank first in the meat list; while the Serbo-Croatians rank lowest in the meat column, as well as in the columns for fruits and regular meals, and are high in no respect.

The Magyar group, on the other hand, was noticeably better than the Polish, their record being more comparable with that of the Germans. This is not surprising in view of the fact that in income, literacy, and ability to speak English, their record was not far behind that of this nationality. Worthy of mention is the fact that the greatest percentage of children eating vegetables was found among the Magyar group.

Income.

It is a popular assumption that the explanation for inadequacy of children's diets must be looked for largely if not solely in the economic status of their parents. That the earnings of the family breadwinner had some share in determining the type of diet of a child in the present

CHART X.—Use of certain items of diet in relation to earnings of chief breadwinner; children 2 to 7 years of age.



study has already been suggested. Chart X, which summarizes in graphic form the relationship of income to each of the most important dietary factors with which this report is concerned, indicates the closeness of the relationship.

In the groups with earnings less than $1,250 there appears to have been little variation as to the use of the different foods or as to the grade of diet, though the use of fruit shows some increase with better earnings even here. After the income reaches $1,250, however, there is a steady though gradual increase in the consumption of all foods and in the diet grade, and a corresponding decrease in coffee drinking and in the percentage of diets lacking four or more items. Of the desirable foods, fruit shows the most rapid increase in use, the percentage of children having it being doubled in the range of income from $1,250 to $2,250. Meat, on the other hand, shows the least change, there being less than 7 per cent difference between the two extremes of income; and vegetables and cereals also vary but slightly within this range. The study shows that meat and vegetables vary comparatively little with any factors, about two-thirds of all children having meat, and less than 50 per cent eating vegetables.

Although better diet conditions are to a considerable degree coincident with higher earnings, it is apparent from Chart X that factors other than poverty must also play a part in keeping the diets on the low plane which they largely occupy. Were income alone responsible, surely there would not be among the children in the highest income group 62.1 per cent without cereals, 44.4 per cent without vegetables, 42.2 per cent without eggs, 38.5 per cent without milk, 30.4 per cent without fruit, 22.9 per cent without potatoes, and 33.6 per cent drinking coffee. Racial dietary prejudices may in part account for the failure to use cereals and potatoes, but they do not explain the prevalence of coffee drinking or the lack of eggs, milk, fruit, and vegetables. The conclusion seems to be warranted that ignorance of the needs of growing children, the lack of realization of the importance of these foods in a young child's diet, and the consequent failure to provide them or to make certain they are eaten, are also important factors.

GENERAL SUMMARY AND CONCLUSIONS.

This inquiry into the conditions surrounding children of preschool age in Gary, Ind., based upon the information secured from the mothers of 6,015 children, and representing 3,991 families, has revealed certain favorable conditions in the community and in the families of the children and others that tend to affect adversely their health and welfare.

COMMUNITY CONDITIONS.

Sewer and water systems had been so constructed that they could readily be extended, and the purity of the water supply was safeguarded; but in some of the less developed sections sewer connections and city water supply were lacking in many homes. Garbage collection and disposal, street cleaning, and inspection of alleys were receiving regular attention (by the end of the period of the study). The milk and food supply was protected by an adequate ordinance—enforced by one milk and food inspector—and the municipal laboratory was equipped to render the services required of it.

Housing regulations were distinctly inadequate, with the result that not only housing shortage but such evils as lot overcrowding, rear houses, and badly constructed tenements and "shacks" appeared in some sections.

The health office had an insufficient staff consisting of a part-time health officer and one nurse. A sanitary inspector and a deputy were employed, however, to inspect housing and sanitation. In the summer of 1918 a beginning was made in municipal child-health work through a station in the center of the foreign district, with a city nurse who was employed as a member of the police staff in charge, for the care of children between the ages of 2 and 6 years as well as of infants.

Aside from the playgrounds in connection with schools, the city had in 1918 only one municipal playground. However, comparatively few large districts were so overcrowded that children of the ages here considered had altogether inadequate play space, and the city was ambitious to provide more ample park and playground facilities. Many of the children had yards of their own, or shared by two or three families. Since the time of the study, the annexation of a town has made possible a lake-front park.

The mothers of almost two-thirds of the children considered had been born outside the United States, and were of many different nationalities, the Slavic predominating; the mothers of only 4 per cent were colored. Inability to speak English handicapped the mothers of 37 per cent of the children and the fathers of 11 per cent. The mothers of almost one-fourth of the children and the fathers of about one-eighth were unable to read or write in any language. All but 6 per cent of the children were living in homes in which both the mother and the father were present. Family life in the group studied was relatively stable; almost four-fifths of the families had moved from one city to another but once or not at all. The families were found to be of average size; two-thirds of the children were in families with from four to six members living in the home. Almost two-thirds of the children were living in districts of comparatively slight development with reference to sanitation and with largely foreign populations.

The information secured in the course of the inquiry indicates to some extent the degree to which the mothers and fathers were able to give their children the essentials of care with reference to shelter, food, recreation, and hygienic habits. No information was obtained regarding clothing, nor were data secured with reference to the moral training of the children. Their physical condition has been described in a separate report.[7]

Housing.

Favorable aspects of the housing as found in this study were the predominance of the one- or two-family dwelling (three-fourths of the children lived in dwellings of this type,) and the possibilities of cross-ventilation (nine-tenths lived in homes which on at least three sides had doors or windows opening to the outer air.) Not quite two-fifths of the children lived in houses equipped with sink, water-closet, and bathtub, and the homes of one-fifth lacked all these sanitary conveniences. Almost four-fifths of the children lived in homes which were not dependent upon a water supply located outside the dwelling. The families of four-fifths of the children did not share a toilet with any other family.

Of the 6,015 children included in the study, one-fourth were in households which were overcrowded, according to the standard of two or more persons per room.

[7] Rude, Anna E., M. D.: Physical Status of Preschool Children, Gary, Ind. U. S. Children's Bureau Publication No. 111.

Economic status.

The chief breadwinner (almost always the father) in 28 per cent of the families earned less than $1,050 a year, and in almost three-fifths he earned less than $1,450. In only 15 per cent of the families did the chief breadwinner's earnings reach or exceed $1,850. The chief breadwinners of three-fifths of the families were employed in the steel industry. Although the information regarding earnings was secured for the year 1917, a year relatively free from unemployment, 52 per cent of the chief breadwinners had experienced periods of nonemployment of from 1 to 12 months' duration. Illness, of self or some other member of the family, was the major cause of nonemployment most often reported, but in 9 per cent of the cases in which the chief breadwinner was a wage earner he had lost working time from industrial causes beyond his control.

During the same year the mothers in about three-fifths of the families were not gainfully employed, either within their homes or outside. The mothers of 33 per cent kept lodgers or did other gainful work at home, and the mothers of only 5 per cent did work which took them outside the home. One child in 13 had been deprived of the care of his mother for longer or shorter periods—during the day, at least—because of the mother's employment. The majority of the children whose mothers had been employed outside the home were cared for at home, by an adult in the household or by an older child. The mothers of three-fifths of the children had no help with their household tasks.

Habits of cleanliness.

Only 21 children failed to receive at least one bath a week in the summer time. In winter, 6 per cent were not bathed thus often, and 61 per cent more were not bathed more than once a week. The younger children were bathed more frequently than the older.

Sleep.

The amount of sleep the children were receiving appeared to be inadequate in at least one-twelfth of the cases. Daytime naps were not common, and 42 per cent of the 2- and 3-year-old children not receiving daytime naps were sleeping less than 12 hours nightly. Nearly two-fifths of the children failed to observe a regular hour for retiring and about the same proportion did not have a regular time for rising. About one-third of the children were sleeping in some of the clothes they wore by day. Only about one-half slept with open windows at all seasons. Four per cent of the children occupied bedrooms alone, and 42 per cent slept four, five, six, or more in a room. Not quite one-fourth of the children had separate beds; 27 per cent shared beds with two other persons.

Diet.

Less than 10 per cent of the children were receiving diets which according to the scale used appeared in every way adequate to their needs; 29.2 per cent were receiving diets of questionable adequacy, and 60.5 per cent had diets plainly incapable of covering all their bodily requirements. The younger children had slightly better diets than the older ones.

With reference to specific items of the diet, only 18.9 per cent of the children were receiving the amount of milk which it is agreed is the minimum they should be given, and more than half the children (57.2 per cent) had no milk at all to drink on the day to which the information relates.[8] On the other hand, more than two-thirds of the children had coffee or tea on the day of the study, many of them more than once. Three-fifths of the diets did not include eggs, three-fourths lacked cereals, and half included no vegetables except potatoes. Potatoes and meat were used more generally, each being present in about two-thirds of the diets. Meals were irregular and unsuited to the needs of children in the majority of cases, and eating between meals was almost universal. In the cases of one-twelfth of all the children both breakfast and lunch failed to meet an extremely low standard of adequacy.

The clinical findings failed to indicate any definite relation between the grade of diet and the weight of the children; however, the physical examinations showed that on the whole the children receiving the better diets were more free from defects and in better physical condition.

Variations of care according to nativity and race.

In practically all respects the foreign-born mothers and the colored mothers were less able than the native white to give their children adequate care. The proportion of home ownership was highest among the foreign born, due possibly to the fact that company provision for housing had been more complete for the native white population. But in respect to sanitary conveniences such as city water, flush toilets, and bathtubs, the native white ranked first, the foreign born second, and the colored third. The homes of foreign-born mothers were the most overcrowded, and the homes of the native white the least.

Economic conditions were better in the homes of children whose mothers were native white than in the homes of those whose mothers were foreign born or colored. The chief breadwinner's annual earnings fell below $850 in the cases of 7 per cent of the children in the first group, but of 17 per cent of those in the second and 24 per cent of those in the third.

[8] For description of method of securing data, see p. 53.

In about three-tenths of the families with native white mothers, in two-fifths of those with foreign born, and in over half of those with colored mothers, the mother had been gainfully employed during the period covered by the inquiry. The proportion of mothers who received no help in their household tasks was largest among the foreign born and smallest among the native white.

No significant differences between the different race and nativity groups appeared with reference to time spent outdoors and hours of sleep, but in other items native white mothers usually ranked first; sometimes the foreign born and sometimes the colored had second place. Children of foreign-born mothers were bathed less often than children of native white or of colored mothers. The superiority of the homes of the native white with reference to sanitary conveniences must be borne in mind in this connection. Observing a regular hour for going to bed was the practice for 80 per cent of the children in the native white group, 63 per cent of the colored children, and 53 per cent of the children in the group of foreign-born parentage. The children of native white and of colored mothers also retired at earlier hours than the children in the other group. A smaller proportion of colored children than of the children of native white or of foreign-born mothers used as night clothing part of their daytime apparel. With respect to ventilation of the bedroom, the care of the children of native white mothers was markedly superior, and the children of the foreign born had the poorest records. Overcrowding in the bedroom was much more prevalent in the homes of the foreign born than in those of the other two groups.

An analysis of the rank of the various nationality groups according to the various items in the diets of the children has been given elsewhere in this report. (See pp. 60, 62.) In most respects the diets of the children of native white mothers were superior to the diets of children in other groups. However, almost half of the children in this favored group had inadequate diets according to the standard employed in this study. The diets of about seven-tenths of the colored children and the children of foreign-born parentage were inadequate.

Variations of care according to income.

The definite correlation between income and infant mortality revealed by infant mortality studies made by the Children's Bureau appeared in the Gary study of infant mortality, the infant death rate being lower in the higher income groups. Similarly, in this study the children of preschool age living in families with the higher incomes were receiving the most nearly adequate care. More than one-tenth of the children in the earnings group under $1,050 had been deprived of the care of their mothers for longer or shorter

periods because of the mothers' gainful employment outside the home. The mothers of half the children in the highest earnings group ($1,850 or over) had hired assistance in their household tasks, in contrast to much lower percentages in the other groups.

Crowding of bedrooms was more usual in families in which the breadwinner's earnings were low.

The use of different foods and the grade of diet showed little variation when comparison was made of the three lowest income groups only. Above $1,250, however, there seemed to be a relation between income, consumption of food, and diet grade. Yet income alone did not appear to be the determining factor in the diets of the children. The discussion of diets has pointed out that ignorance of the needs of growing children and of the importance of certain essential foods is at least equally responsible with the economic factor for the deficiencies found.

CONCLUSIONS.

The findings of this study relate only to the children of one city; doubtless similar conditions, with more or less minor variations, exist in many other communities. Certain of the conditions revealed may be remedied by community action for better housing and by still further extension of sewer and water connections. Increased earnings in many of the homes would undoubtedly result in more adequate care of the children. Of fundamental and immediate importance, also, is the education of the mothers in the essentials of child care—the food requirements of children and the methods of preparing suitable meals for them, and their needs with reference to sleep, fresh air, and cleanliness.

APPENDIXES.

APPENDIX A.

SAMPLE DIETS FOR THE VARIOUS DIET GRADES.

GRADE A.—*Adequate and suitable in character.*

[Age, 2 years.]

Meal.	Hour.	Milk.	Other foods.
Breakfast	8.00	Half pint	Oatmeal, toast, prunes.
Dinner	12.30	.....do	Mashed potato, spinach, soft egg, bread and butter.
Supper	5.30	.....do	Toast, baked apple.

Comments: Contains 1½ pints milk, a vegetable besides potato, two fruits, and an egg. Requirements seem well covered. Foods are suitable in character, meals regular and at good hours. There is no haphazard eating between meals.

GRADE B.—*Contains essential elements but fails to measure up to A standard.*

[Age, 4 years.]

Meal.	Hour.	Milk.	Other foods.
Breakfast	8.15	Half pint	Shredded wheat biscuit, 1 dish cornflakes, and milk.
Dinner	12.00	None	Steak, potatoes, navy beans, bread, and butter.
Supper	5.30	.....do	Steak, roast pork, sweet corn, potato, buttermilk, apple pie, cheese.
Other	Irregularly during day.	.....do	Crackers, apple, ice-cream cone, muskmelon.

Comments: Child probably has 1 pint of milk but not the 1½ pints for the A standard. The requirements may be covered but the meals are not ideal, and eating between meals is too promiscuous for an A diet.

GRADE C.—*Questionable.*

[Age, 6 years.]

Meal.	Hour.	Milk.	Other foods.
Breakfast	9.30	None	Cocoa and oatmeal.
Dinner	1.00	.....do	Beef, potatoes, apple, bread, and butter.
Supper	7.00	Half pint	2 fried eggs, canteloupe, bread, and butter.
Other	9 p. m. (irregular).	None	2 or 3 plums, crackers.

Comments: Diet is better than D diets because of some milk, fruits, eggs, and whole cereal. It can not be graded as B because milk is under standard, and it is doubtful if requirements are all met. Meals are irregular and "piecing" common.

GRADE D.—*Inadequate.*

[Age, 4 years.]

Meal.	Hour.	Milk.	Other foods.
Breakfast	7.30	None	1 cup coffee, bread.
Dinner	1.00 (irregular).	.....do	1 cup tea, 2 cakes.
Supper	6.30	.....do	Beef soup with carrots, potato, beans, 2 slices bread.
Other times	Irregular	.....do	Bread.

Comments: Without milk the calcium can not fail to be low. The diet appears unquestionably low in calories, in adequate protein, in minerals, and in vitamines. It perhaps should be called an E diet, but the meat and vegetables make it somewhat superior to ones rated as E.

GRADE E.—*Extremely inadequate.*

[Age, 5 years.]

Meal.	Hour.	Milk.	Other foods.
Breakfast	9.00	None	Coffee, 1 slice bread.
Dinner	1.00	.....do	Spaghetti, bread, root beer.
Supper	6.00	.....do	Lettuce with vinegar, bread, root beer.
Other	Irregular	.....do	Bread.

Comments: Diet seems totally lacking in all requirements of an adequate diet.

APPEN

SCHEDULE USED

Sym. | Surname.....Father.....

BABY—N. 1. Name..... | S. N.
2. B. G. 3. L. B., S. B., M. 4. L. I.....
5. Date of birth....., 1916.
6. Attendant: (a) Phy'n, Hosp., Mwf., Oth., N. (b) Late, N.....hrs.....
(c) Name.....
7. Died: (a) Date....., 191 (b) Age.....m.....
(c) Phy'n.....
(d) D. C. Causes:.....

8. Feeding: (a) Breast only, through.....m. (b) Weaned end of.....m.
(c) Food: Cow's milk, N. Cond. milk, N. Solid food, N.....
Prop. foods, N. (specify).....
(d) Supervised by: N., Phy'n, Nurse, Lit., Oth.....
(e) Cause of weaning:.....Phy'n, N.
9. Bedroom: (a) Sep. room, N. Ad.....Ch.....Total.....
(b) Specify oth. occ.....
(c) Sep. bed, N. Ad.....Ch.....Total.....
(d) Specify oth. occ.....
(e) Window open: Winter, N.; Summer, N.....
10. No. baths per wk.: W.....S.....
11. Outdoor air: (a) Amount.....hrs. (b) Place.....

MOTHER—12. Prenatal care: (a) Lit., N.; Nurse, N.; Phy'n, N.

	1	2	3	4	5	6	7	8	9	Phys. exam.
(b) Saw phyn., N.....										(d) H. L. A., N.
(c) Urine exam., N.....										(e) Meas., N.

Confinement: 13. No. visits after by (a) Att'd.....(b) Oth. med.....
14. In bed.....d.
15. Complications: (a) Instr. del., N.; (b) C. S., N.; (c) Conv., N.....

16. Nursing care: (a) Kind. | (b) Duration.

17. Help with h'wk. (a) Acc't preg., N.;
(b) Acc't conf., N.;
(c) Usual, N.;
* (d) Special, N.;

* 18. Mother's Employment History.

(a) Occupations.	(b) Industries.	(c) Extent.	(d) Ages.

19. Work year before confinement: (a) Lodgers.....ceased.....bef.
(b) Oth. gain. home (specify).....ceased.....bef.
(c) Outside (specify).....ceased.....bef.
20. Work year after confinement: (a) Lodgers.....resumed.....aft.
(b) Oth. gain. home (specify).....resumed.....aft.
(c) Outside (specify).....resumed.....aft.
21. From baby acc't wk. from.....mo. to.....mo. (a) Reg., Irreg.
(b) Extent.....
(c) Caretaker.....Age.....At home, Away
(d) Oth. (specify).....
22. (a) Age.....(Mo....., 1917); (b) Marriage ages.....
(c) Duration.....

23. MATERNITY HISTORY.

No.	(a) Sex.	(b) C's age 1917.	(c) Mo. of birth.	(d) M's age.	(e) Period gest.	(f) Cause of death.	(g) Age at death.
1							
2							

DIX B.

IN STUDY.

Mother's maiden name..... | Sym.

FATHER—24. (a) Occ.....(b) Ind.....
(c) Age.....yrs. (d) Emp., Own acc't, Wage earner.....
INCOME—25. Father's wages $.....per hr., day, wk., mo., yr.....
26. Nonemp.: N. (Specify causes and periods).....
.....27. Ann. earn. $.....
28. Mother's earnings: (a) Outside $.....(b) Lodg. $.....
(c) Oth. gain. home wk., $.....(d) Total $.....
29. Other sources.....Total $.....
(S) Agg. $.....
HOME—30. Lived in home described from....., 19 to....., 1918.
31. Bldg. faces Al., St., Rear. 32. Dwel. in bldg.....33. Floor: B, 1, 2, 3, 4.
34. Air on 4, 3, 2, 1 sides. 35. Persons: (a) Fam.....(b) Oth.....(c) Tot.....
36. Specify others: (a) Ad.....(b) Ch.....(c) Relationship to children.....
37. Rooms.....38. Sleep. rms.....39. Dark rms. (a) No.....(b) Use.....
40. Water: (a) City, Dug well, Dr. well, Cist. (b) In dwel., Out dwel. (specify.).....
41. Toilet: (a) W. C., P. (b) In dwel., Hall, Por., Cel., Yd. (c) Fam. using.....
42. Bath, N. 43. Sink, N. 44. Rental $.....per m.; Own, Buying.....
45. Description of premises (yd., bldg., and dwel.).....

46.	(a) N. W. N. P.	(b) N. W. F. M. P.	(c) N. B.	(d) F.W.	(e) F. O.	(f) Yrs. in U. S.	(g) Yrs. in city.	(h) Country of birth.	(i) Nationality.	(j) Spk. Eng.	(k) R. and W.
M.....										Y. N..	Y. N..
F.....										Y. N..	Y. N..

47. Removals since January 1, 1911.

	(a) Came to (specify city and State).	(b) Mo. and yr.	(c) Cause.
1.....			
2.....			
3.....			
4.....			
5.....			
6.....			

48. Will mother bring or send children to conferences: Y. N.....
49. Prefers appointment: (a) A. M., P. M. (b) M., T., W., Th., F., S.....

Rough Notes:

Sym. | City and State..... Street address ..... Wd. ..... S. No. .....

LIVING CHILDREN 2 TO 7 YEARS OF AGE

1. 1. Preg. no. 2. Age ..... yrs. 3. Inf. feeding: (a) Breast only, through ..... m. (b) Weaned end of ..... m.

4. Present diet.	(a) Hour.	(b) Usual.	(c) Amt. milk.	(d) Menu day preceding visit (food and beverages).	S. N.
Morning		Y. N.			
Noon		Y. N.			
Night		Y. N.			
Other		Y. N.			

5. Sleep: (a) Retired ..... P. M.; Usual, N. (b) Arose ..... A. M.; Usual, N. (c) Nap, N. ..... hrs.; Usual, N. (d) Total sleep ..... hrs., Usual, N.

6. Bedroom: (a) Separate room, N. (specify other occ.)..... Ch. ..... Ad. ..... Total .....
(b) Separate bed, N. (specify other occ.)..... Ch. ..... Ad. ..... Total .....
(c) Windows open nights: Winter, N, Summer, N. 7. Night clothes: (a) Specify..... (b) Worn during day, N.
8. No. baths per wk.: Winter ..... Summer ..... 9. Dentist: (a) Y. N. (b) Extract, Y. N. (c) Other, Y. N. (specify causes and number of visits).....

10. Child Away from Mother.

(a) Ages.	(b) Extent and duration.	(c) Causes.	(d) Caretaker.	(e) Age of ctker.	(f) Remarks.

11. Illnesses: (a) Sc. fever ..... yrs., N. (b) Wh. cgh. ..... yrs., N. (c) Measles ..... yrs., N. (d) Inf. paral. ..... yrs., N.
12. Out-of-doors: (a) No. hrs. daily ..... (b) Remarks .....

2. 1. Preg. no. 2. Age ..... yrs. 3. Inf. feeding. (a) Breast only, through ..... m. (b) Weaned end of ..... m.

4. Present diet.	(a) Hour.	(b) Usual.	(c) Amt. milk.	(d) Menu day preceding visit (food and beverages).	S. N.
Morning		Y. N.			
Noon		Y. N.			
Night		Y. N.			
Other		Y. N.			

5. Sleep: (a) Retired ..... P. M.; Usual, N. (b) Arose ..... A. M.; Usual, N. (c) Nap, N. ..... hrs.; Usual, N. (d) Total sleep ..... hrs.; Usual, N.

6. Bedroom: (a) Separate room, N. (specify other occ.)..... Ch. ..... Ad. ..... Total .....
(b) Separate bed, N. (specify other occ.)..... Ch. ..... Ad. ..... Total .....
(c) Windows open nights: Winter, N, Summer, N. 7. Night clothes: (a) Specify..... (b) Worn during day, N.
8. No. baths per wk.: Winter ..... Summer ..... 9. Dentist: (a) Y. N. (b) Extract, Y. N. (c) Other, Y. N. (specify causes and number of visits).....

10. Child Away from Mother.

(a) Ages.	(b) Extent and duration.	(c) Causes.	(d) Caretaker.	(e) Age of ctker.	(f) Remarks.

11. Illnesses: (a) Sc. fever ..... yrs., N. (b) Wh. cgh. ..... yrs., N. (c) Measles ..... yrs., N. (d) Inf. paral. ..... yrs., N.
12. Out-of-doors: (a) No. hrs. daily ..... (b) Remarks .....

3. 1. Preg. no. 2. Age ..... yrs. 3. Inf. feeding: (a) Breast only, through ..... m. (b) Weaned end of ..... m. S. N.

4. Present diet.	(a) Hour.	(b) Usual.	(c) Amt. milk.	(d) Menu day preceding visit (food and beverages).
Morning		Y. N.		
Noon		Y. N.		
Night		Y. N.		
Other		Y. N.		

5. Sleep: (a) Retired ..... P. M.; Usual, N. (b) Arose ..... A. M.; Usual, N. (c) Nap, N. ..... hrs.; Usual, N. (d) Total sleep ..... hrs.; Usual, N.

6. Bedroom: (a) Separate room, N. (specify other occ.) ..... Ch. ..... Ad. ..... Total .....
(b) Separate bed, N. (specify other occ.) ..... Ch. ..... Ad. ..... Total .....
(c) Windows open nights: Winter, N, Summer, N. 7. Night clothes: (a) Specify ..... (b) Worn during day, N.
8. No. baths per wk.: Winter ..... Summer ..... 9. Dentist: (a) Y. N. (b) Extract, Y. N. (c) Other, Y. N. (specify causes and number of visits) .....

10. Child Away from Mother.

(a) Ages.	(b) Extent and duration.	(c) Causes.	(d) Caretaker.	(e) Age of etker.	(f) Remarks.

11. Illnesses: (a) Sc. fever ..... yrs., N. (b) Wh. cgh. ..... yrs., N. (c) Measles ..... yrs., N. (d) Inf. paral. ..... yrs., N.
12. Out-of-doors: (a) No. hrs. daily ..... (b) Remarks .....

Mother dead: (a) Date ..... (b) City and State ..... (c) Causes .....
Schedule inf. given by M., F., Oth. (specify) ..... Agent: ..... Date: ....., 1918.

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GENERAL TABLES.

GENERAL TABLES.

GENERAL TABLE I.—*Number of years residence of foreign-born mothers in the United States, by nationality of mother.*

Nationality of mother.	Children 2 to 7 years of age of foreign-born mothers.						
	Total.	Number of years residence of mother in United States.					
		Less than 5 years.		5 years and over.		Not reported.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	3,934	199	5.1	3,696	94.0	39	1.0
Polish	923	37	4.0	875	94.8	11	1.2
Serbo-Croatian	587	32	5.5	552	94.0	3	.5
Slovak	546	9	1.6	527	96.5	10	1.8
Magyar	291	10	3.4	279	95.9	2	.7
Italian	265	17	6.4	243	91.7	5	1.9
German	228	5	2.2	221	96.9	2	.9
Lithuanian	225	11	4.9	214	95.1	.....	.....
All other foreign born	869	78	9.0	785	90.3	6	.7

GENERAL TABLE II.—*Number of persons in family, by color and nationality of mother.*

Color and nationality of mother.	Total children.	Children 2 to 7 years of age.																							
		Number of persons in family.																							
		1		2		3		4		5		6		7		8		9		10		11		12 and over.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	36	0.6	58	1.0	593	9.9	1,299	21.6	1,505	25.0	1,157	19.2	684	11.4	386	6.4	173	2.9	53	0.9	35	0.6	17	0.3	19	0.3
Native white	1,843	12	.7	28	1.5	327	17.7	536	29.1	429	23.3	264	14.3	125	6.8	74	4.0	19	1.0	7	.4	13	.7	2	.1	7	.4
Foreign-born white	3,934	12	.3	16	.4	218	5.5	706	17.9	1,037	26.4	866	22.0	541	13.8	303	7.7	148	3.8	46	1.2	20	.5	10	.3	11	.3
Polish	923	.....	.....	3	.3	34	3.7	155	16.8	255	27.6	229	24.8	115	12.5	81	8.8	36	3.9	9	1.0	6	.6	.....	.....	.....	.....
Serbo-Croatian	587	5	.9	3	.5	33	5.6	92	15.7	163	27.8	118	20.1	91	15.5	48	8.2	17	2.9	3	.5	4	.7	6	1.0	4	.7
Slovak	546	2	.4	1	.2	17	3.1	78	14.3	100	18.3	147	26.9	99	18.1	57	10.4	28	5.1	14	2.6	3	.5	.....	.....	.....	.....
Magyar	291	.....	.....	2	.7	17	5.8	56	19.2	68	23.4	68	23.4	31	10.7	27	9.3	15	5.2	2	.7	2	.7	2	.7	1	.3
Italian	265	1	.4	.....	.....	10	3.8	27	10.2	68	25.7	85	32.1	37	14.0	13	4.9	18	6.8	6	2.3	.....	.....	.....	.....	.....	.....
German	228	.....	.....	1	.4	19	8.3	48	21.1	78	34.2	44	19.3	20	8.8	8	3.5	2	.9	5	2.2	3	1.3	.....	.....	.....	.....
Lithuanian	225	.....	.....	.....	.....	14	6.2	45	20.0	60	26.7	43	19.1	38	16.9	20	8.9	3	1.3	2	.9	.....	.....	.....	.....	.....	.....
All other	869	4	.5	6	.7	74	8.5	205	23.6	245	28.2	132	15.2	110	12.7	49	5.6	29	3.3	5	.6	2	.2	2	.2	6	.7
Negro	232	10	4.3	14	6.0	45	19.4	56	24.1	39	16.8	27	11.6	18	7.8	9	3.9	6	2.6	.....	.....	2	.9	5	2.2	1	.4
Not reported	6	2	.....	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE III.—*Length of residence in dwelling and color and nationality of mother, by family tenure of home.*

Length of residence in dwelling and color and nationality of mother.	Children 2 to 7 years of age.									
	Total.		Family tenure of home.							
			Owners.		Buyers.		"Squatters."	Renters.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]		Number.	Per cent distribution.	
Total	6,015	100.0	1,799	100.0	900	100.0	81	3,210	100.0	25
Less than 1 year	2,284	38.0	291	16.2	272	30.2	13	1,707	53.2	1
1 year, less than 2	1,131	18.8	280	15.6	208	23.1	19	623	19.4	1
2 years, less than 3	738	12.3	211	11.7	132	14.7	16	379	11.8	.....
3 years, less than 4	394	6.6	142	7.9	59	6.6	9	184	5.7	.....
4 years, less than 5	408	6.8	191	10.6	89	9.9	6	122	3.8	.....
5 years and over	1,004	16.7	674	37.5	136	15.1	17	173	5.4	4
Not reported	56	0.9	10	0.6	4	0.4	1	22	0.7	19
Native white mothers	1,843	100.0	405	100.0	241	100.0	10	1,178	100.0	9
Less than 1 year	770	41.8	84	20.7	76	31.5	1	608	51.6	1
1 year, less than 2	353	19.2	66	16.3	63	26.1	.....	223	18.9	1
2 years, less than 3	199	10.8	43	10.6	27	11.2	1	128	10.9	.....
3 years, less than 4	121	6.6	27	6.7	20	8.3	.....	74	6.3	.....
4 years, less than 5	114	6.2	44	10.9	20	8.3	.....	50	4.2	.....
5 years and over	272	14.8	138	34.1	34	14.1	7	93	7.9	.....
Not reported	14	0.8	3	0.7	1	0.4	1	2	0.2	7
Foreign-born mothers	3,934	100.0	1,387	100.0	638	100 0	67	1,827	100.0	15
Less than 1 year	1,347	34.2	206	14.9	184	28.8	12	945	51.7	.....
1 year, less than 2	736	18.7	213	15.4	140	21.9	19	364	19.9	.....
2 years, less than 3	523	13.3	167	12.0	103	16.1	11	242	13.2	.....
3 years, less than 4	272	6.9	115	8.3	39	6.1	9	109	6.0	.....
4 years, less than 5	292	7.4	147	10.6	67	10.5	6	72	3.9	.....
5 years and over	725	18.4	532	38.4	102	16.0	10	77	4.2	4
Not reported	39	1.0	7	0.5	3	0.5	.....	18	1.0	11
Polish	923	100.0	315	100.0	192	100.0	8	408	100.0	.....
Less than 1 year	303	32.8	54	17.1	35	18.2	3	211	51.7	.....
1 year, less than 2	200	21.7	49	15.6	53	27.6	.....	98	24.0	.....
2 years, less than 3	121	13.1	29	9.2	35	18.2	2	55	13.5	.....
3 years, less than 4	60	6.5	28	8.9	16	8.3	.....	16	3.9	.....
4 years, less than 5	55	6.0	26	8.3	16	8.3	.....	13	3.2	.....
5 years and over	176	19.1	127	40.3	37	19.3	3	9	2.2	.....
Not reported	8	0.9	2	0.6	.....	.....	.....	6	1.5	.....
Serbo-Croatian	587	100.0	239	100.0	58	.....	.....	286	100.0	4
Less than 1 year	198	33.7	27	11.3	28	.....	.....	143	50.0	.....
1 year, less than 2	108	18.4	37	15.5	8	.....	.....	63	22.0	.....
2 years, less than 3	70	11.9	26	10.9	7	.....	.....	37	12.9	.....
3 years, less than 4	32	5.5	17	7.1	2	.....	.....	13	4.5	.....
4 years, less than 5	50	8.5	30	12.6	5	.....	.....	15	5.2	.....
5 years and over	120	20.4	101	42.3	8	.....	.....	11	3.8	.....
Not reported	9	1.5	1	0.4	.....	.....	.....	4	1.4	4
Slovak	546	100.0	229	100.0	92	.....	12	212	100.0	1
Less than 1 year	161	29.5	24	10.5	23	.....	.....	114	53.8	.....
1 year, less than 2	81	14.8	26	11.4	19	.....	4	32	15.1	.....
2 years, less than 3	89	16.3	31	13.5	23	.....	1	34	16.0	.....
3 years, less than 4	51	9.3	24	10.5	5	.....	5	17	8.0	.....
4 years, less than 5	44	8.1	25	10.9	7	.....	2	10	4.7	.....
5 years and over	118	21.6	99	43.2	14	.....	.....	4	1.9	1
Not reported	2	0.4	.....	.....	1	.....	.....	1	0.5	.....
Magyar	291	100.0	107	100.0	40	.....	10	133	100.0	1
Less than 1 year	122	41.9	29	27.1	13	.....	2	78	58.6	.....
1 year, less than 2	35	12.0	10	9.3	8	.....	1	16	12.0	.....
2 years, less than 3	36	12.4	10	9.3	4	.....	1	21	15.8	.....
3 years, less than 4	22	7.6	9	8.4	.....	.....	4	9	6.8	.....
4 years, less than 5	25	8.6	11	10.3	8	.....	.....	6	4.5	.....
5 years and over	50	17.2	38	35.5	7	.....	2	3	2.3	.....
Not reported	1	0.3	.....	.....	.....	.....	.....	.....	.....	1
Italian	265	100.0	86	.....	48	.....	2	129	100.0	.....
Less than 1 year	126	47.5	18	.....	25	.....	.....	83	64.3	.....
1 year, less than 2	41	15.5	6	.....	12	.....	2	21	16.3	.....
2 years, less than 3	26	9.8	13	.....	2	.....	.....	11	8.5	.....
3 years, less than 4	17	6.4	9	.....	2	.....	.....	6	4.7	.....
4 years, less than 5	8	3.0	5	.....	3	.....	.....	.....	.....	.....
5 years and over	45	17.0	35	.....	3	.....	.....	7	5.4	.....
Not reported	2	0.8	.....	.....	1	.....	.....	1	0.8	.....

[1] Per cent distribution not shown where base is less than 100.

GENERAL TABLE III.—*Length of residence in dwelling and color and nationality of mother, by family tenure of home*—Continued.

Length of residence in dwelling and color and nationality of mother.	Children 2 to 7 years of age.									
	Total.		Family tenure of home.							
			Owners.		Buyers.		"Squatters."[1]	Renters.		Not reported.[1]
	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]		Number.	Per cent distribution.[1]	
Foreign-born mothers—Con.										
German	228	100.0	63	.....	38	.....	.....	127	100.0	.....
Less than 1 year	73	32.0	7	.....	6	.....	.....	60	47.2	.....
1 year, less than 2	43	18.9	10	.....	4	.....	.....	29	22.8	.....
2 years, less than 3	32	14.0	11	.....	8	.....	.....	13	10.2	.....
3 years, less than 4	10	4.4	2	.....	3	.....	.....	5	3.9	.....
4 years, less than 5	20	8.8	9	.....	7	.....	.....	4	3.1	.....
5 years and over	50	21.9	24	.....	10	.....	.....	16	12.6	.....
Lithuanian	225	100.0	107	100.0	39	.....	.....	79	.....	.....
Less than 1 year	54	24.0	10	9.3	6	.....	.....	38	.....	.....
1 year, less than 2	56	24.9	25	23.4	11	.....	.....	20	.....	.....
2 years, less than 3	32	14.2	14	13.1	9	.....	.....	9	.....	.....
3 years, less than 4	16	7.1	9	8.4	.....	.....	.....	7	.....	.....
4 years, less than 5	16	7.1	8	7.5	5	.....	.....	3	.....	.....
5 years and over	47	20.9	39	36.4	8	.....	.....	.....	.....	.....
Not reported	4	1.8	2	1.9	.....	.....	.....	2	.....	.....
All other	869	100.0	241	100.0	131	100.0	35	453	100.0	9
Less than 1 year	310	35.7	37	15.4	48	36.6	7	218	48.1	.....
1 year, less than 2	172	19.8	50	20.7	25	19.1	12	85	18.8	.....
2 years, less than 3	117	13.5	33	13.7	15	11.5	7	62	13.7	.....
3 years, less than 4	64	7.4	17	7.1	11	8.4	.....	36	7.9	.....
4 years, less than 5	74	8.5	33	13.7	16	12.2	4	21	4.6	.....
5 years and over	119	13.7	69	28.6	15	11.5	5	27	6.0	3
Not reported	13	1.5	2	0.8	1	0.8	.....	4	0.9	6
Negro mothers	232	100.0	5	.....	21	.....	4	201	100.0	1
Less than 1 year	164	70.7	1	.....	12	.....	.....	151	75.1	.....
1 year, less than 2	41	17.7	1	.....	5	.....	.....	35	17.4	.....
2 years, less than 3	16	6.9	1	.....	2	.....	4	9	4.5	.....
3 years, less than 4	1	0.4	.....	.....	.....	.....	.....	1	0.5	.....
4 years, less than 5	2	0.9	.....	.....	2	.....	.....	.....	.....	.....
5 years and over	5	2.2	2	.....	.....	.....	.....	3	1.5	.....
Not reported	3	1.3	.....	.....	.....	.....	.....	2	1.0	1
Nationality of mother not reported	6	.....	2	.....	.....	.....	.....	4	.....	.....
Less than 1 year	3	.....	.....	.....	.....	.....	.....	3	.....	.....
1 year, less than 2	1	.....	.....	.....	.....	.....	.....	1	.....	.....
5 years and over	2	.....	2	.....	.....	.....	.....	.....	.....	.....

[1] Per cent distribution not shown where base is less than 100.

GENERAL TABLE IV.—*Amount of monthly rental, by number of rooms in dwelling.*

Number of rooms in dwelling.	Children 2 to 7 years of age.													
	Total.	Amount of monthly rental.											Dwelling not rented.	Tenure of dwelling not reported.
		Free.	Less than $5.	$5, less than $10.	$10, less than $15.	$15, less than $20.	$20, less than $25.	$25, less than $30.	$30, less than $35.	$35, less than $40.	$40 and over.	Amount not reported.		
Total	6,015	10	5	263	671	720	473	266	167	204	183	248	2,780	25
1	28			4	1							10	13	
2	506	7	2	155	115	3	2	1	1			33	187	
3	892	3	2	63	229	113	31	9	17	6	2	46	371	
4	2,304			32	248	443	209	108	40	26	11	67	1,117	
5	1,060		1	9	48	96	166	67	42	85	61	44	439	2
6	737				27	58	53	67	55	52	46	19	356	4
7	240				3	5	6	8	10	6	32	10	160	
8	143						5		1	28	18	12	79	
9	44					2	1	4		1	5	4	27	
10 and over	40							2	1		5	3	29	
Not reported	21												2	19

GENERAL TABLE V.—*Location of water supply, by district of residence.*

District of residence.	Children 2 to 7 years of age.						
	Total.	Location of water supply.					
		In dwelling.		Outside dwelling.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	4,757	79.1	1,239	20.6	19	0.3
Ambridge	162	160	98.8	2	1.2	.....	.....
Clark	40	24	.....	16	.....	.....	.....
First Subdivision	1,496	1,465	97.9	24	1.6	7	.5
Lincoln Park	99	57	.....	42	.....	.....	.....
Ridge Road and Glen Park	393	284	72.3	108	27.5	1	.3
South Side	2,890	2,231	77.2	648	22.4	11	.4
Tolleston	892	511	57.3	381	42.7	.....	.....
West Gary	43	25	.....	18	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE VI.—*Sanitary accommodations of dwelling, by district of residence.*

District of residence.	Children 2 to 7 years of age.																					
	Total.	Sanitary accommodations.																				
		Water supply.						Toilet.						Bathtub.						Sink.					
		City.		Well or cistern.		Not reported.		Water-closet.		Yard privy.		Not reported.		Yes.		No.		Not reported.		Yes.		No.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]
Total	6,015	4,498	74.8	1,496	24.9	21	0.3	3,964	65.9	2,032	33.8	19	0.3	2,236	37.2	3,760	62.5	19	0.3	4,637	77.1	1,356	22.5	22	0.4
Ambridge	162	162	100.0	.....	.....	.....	.....	162	100.0	.....	.....	.....	.....	162	100.0	.....	.....	.....	.....	162	100.0	.....	.....	.....	.....
Clark	40	.....	.....	40	.....	.....	.....	.....	.....	40	.....	.....	.....	.....	.....	40	.....	.....	.....	24	.....	16	.....	.....	.....
First Subdivision	1,496	1,484	99.2	5	0.3	7	.5	1,481	99.0	8	.5	7	.5	1,321	88.5	165	11.0	7	.5	1,457	97.4	32	2.1	7	.5
Lincoln Park	99	50	.....	49	.....	.....	.....	35	.....	64	.....	.....	.....	15	.....	84	.....	.....	.....	54	.....	45	.....	.....	.....
Ridge Road and Glen Park	393	282	71.8	110	28.0	1	.3	130	33.1	262	66.7	1	.3	100	25.4	292	74.3	1	.3	273	69.5	119	30.3	1	.3
South Side	2,890	2,245	77.7	632	21.9	13	.4	1,952	67.5	927	32.1	11	.4	520	18.0	2,359	81.6	11	.4	2,182	75.5	697	24.1	11	.4
Tolleston	892	275	30.8	617	69.2	.....	.....	202	22.6	690	77.4	.....	.....	114	12.8	778	87.2	.....	.....	461	51.7	429	48.1	2	.1
West Gary	43	.....	.....	43	.....	.....	.....	2	.....	41	.....	.....	.....	1	.....	42	.....	.....	.....	24	.....	18	.....	1	.....

[1] Not shown where base is less than 100.

GENERAL TABLE VII.—*Sanitary accommodations of dwelling, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.																					
	Total.	Sanitary accommodations.																				
		Water supply.						Toilet.						Bathtub.						Sink.					
		City water.		Well or cistern.		Not reported.		Water-closet.		Yard privy.		Not reported.		Yes.		No.		Not reported.		Yes.		No.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.
Total	6,015	4,498	74.8	1,496	24.9	21	0.3	3,964	65.9	2,032	33.8	19	0.3	2,236	37.2	3,760	62.5	19	0.3	4,637	77.1	1,356	22.5	22	0.4
Native white	1,843	1,542	83.7	294	16.0	7	.4	1,437	78.0	399	21.6	7	.4	1,277	69.3	559	30.3	7	.4	1,607	87.2	228	12.4	8	.4
Foreign-born white	3,934	2,790	70.9	1,131	28.8	13	.3	2,395	60.8	1,528	38.9	11	.3	912	23.2	3,011	76.5	11	.3	2,874	73.1	1,047	26.6	13	.3
Polish	923	633	68.6	290	31.4	.....	.....	491	53.2	432	46.8	.....	.....	82	8.9	841	91.1	.....	.....	622	67.4	301	32.6	.....	.....
Serbo-Croatian	587	465	79.2	118	20.1	4	.7	413	70.4	170	29.0	4	.7	107	18.2	476	81.1	4	.7	466	79.4	115	19.6	6	1.0
Slovak	546	327	59.9	217	39.8	2	.4	278	50.9	268	49.1	.....	.....	82	15.0	464	85.0	.....	.....	330	60.5	216	39.6	.....	.....
Magyar	291	200	68.7	90	30.9	1	.3	164	56.4	126	43.3	1	.3	85	29.2	205	70.4	1	.3	191	65.6	99	34.0	1	.3
Italian	265	224	84.5	41	15.5	.....	.....	212	80.0	53	20.0	.....	.....	71	26.8	194	73.2	.....	.....	241	89.9	24	9.1	.....	.....
German	228	175	76.8	53	23.2	.....	.....	140	61.4	88	38.6	.....	.....	91	39.9	137	60.1	.....	.....	198	86.8	30	13.2	.....	.....
Lithuanian	225	120	53.3	105	46.7	.....	.....	111	49.3	114	50.7	.....	.....	25	11.1	200	88.9	.....	.....	157	69.8	68	30.2	.....	.....
All other	869	646	74.4	217	25.0	6	.7	586	67.4	277	31.9	6	.7	369	42.5	494	56.9	6	.7	669	77.0	194	22.3	6	.7
Negro	232	160	69.0	71	30.6	1	.4	127	54.7	104	44.8	1	.4	42	18.1	189	81.5	1	.4	150	64.7	81	34.9	1	.4
Not reported	6	6	.....	.....	.....	.....	.....	5	.....	1	.....	.....	.....	5	.....	1	.....	.....	.....	6	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE VIII.—*Type and location of toilet, by number of families using toilet and district of residence.*

Number of families using toilet and district of residence.	Children 2 to 7 years of age.																	
	Total.	Type and location of toilet.																
		Water-closet.														Yard privy.		Not reported.	
		Total.		In dwelling.		Outside dwelling.													
						Hall.		Porch.		Cellar.		Yard.		Location not reported.					
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per-cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]
All districts	6,015	3,964	65.9	3,141	52.2	414	6.9	123	2.0	195	3.2	89	1.5	2	(2)	2,032	33.8	19	0.3
1	4,782	3,264	68.3	3,015	63.0	53	1.1	40	.8	144	3.0	12	.3	.....	.....	1,518	31.7	.....	.....
2	910	534	58.7	120	13.2	286	31.4	55	6.0	43	4.7	28	3.1	2	.2	376	41.3	.....	.....
3	176	91	51.7	4	2.3	45	25.6	26	14.8	6	3.4	10	5.7	.....	.....	85	48.3	.....	.....
4 and over	111	66	59.5	2	1.8	24	21.6	2	1.8	2	1.8	36	32.4	.....	.....	45	40.5	.....	.....
Not reported	36	9	.....	.....	.....	6	.....	.....	.....	.....	.....	3	.....	.....	.....	8	.....	19	.....
Ambridge	162	162	100.0	162	100.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	162	162	100.0	162	100.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clark	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	.....	.....	.....
1	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	.....	.....	.....
First Subdivision	1,496	1,481	99.0	1,296	86.6	74	4.9	1	.1	110	7.4	.....	.....	.....	.....	8	.5	7	.5
1	1,330	1,323	99.5	1,216	91.4	1	.1	.....	.....	106	8.0	.....	.....	.....	.....	7	.5	.....	.....
2	135	134	99.3	77	57.0	52	38.5	1	.7	4	3.0	.....	.....	.....	.....	1	.7	.....	.....
3	20	20	.....	3	.....	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4 and over	3	3	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Not reported	8	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Lincoln Park	99	35	.....	28	.....	1	.....	1	.....	5	.....	.....	.....	.....	.....	64	.....	.....	.....
1	90	35	.....	28	.....	1	.....	1	.....	5	.....	.....	.....	.....	.....	55	.....	.....	.....
2	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	.....
Ridge Road and Glen Park	393	130	33.1	120	30.5	4	1.0	2	.5	3	.8	1	.3	.....	.....	262	66.7	1	.3
1	366	126	34.4	120	32.8	1	.3	2	.5	3	.8	.....	.....	.....	.....	240	65.6	.....	.....
2	26	4	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	22	.....	.....	.....
Not reported	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....

[1] Not shown where base is less than 100.

[2] Less than one-tenth of 1 per cent.

GENERAL TABLE VIII.—*Type and location of toilet, by number of families using toilet and district of residence*—Concluded.

Number of families using toilet and district of residence.	Children 2 to 7 years of age.																	
	Total.	Type and location of toilet.																
		Water-closet.														Yard privy.		Not reported.	
		Total.		In dwelling.		Outside dwelling.													
						Hall.		Porch.		Cellar.		Yard.		Location not reported.					
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]
South side	2,890	1,952	67.5	1,358	47.0	323	11.2	115	4.0	70	2.4	84	2.9	2	0.1	927	32.1	11	0.4
1	2,033	1,431	70.4	1,314	64.6	50	2.5	33	1.6	25	1.2	9	.4	.....	.....	602	29.6	.....	.....
2	612	380	62.1	41	6.7	219	35.8	54	8.8	37	6.0	27	4.4	2	.3	232	37.9	.....	.....
3	128	70	54.7	1	.8	28	21.9	26	20.3	6	4.7	9	7.0	.....	.....	58	45.3	.....	.....
4 and over	91	63	.....	2	.....	21	.....	2	.....	2	.....	36	.....	.....	.....	28	.....	.....	.....
Not reported	26	8	.....	.....	.....	5	.....	.....	.....	.....	.....	3	.....	.....	.....	7	.....	11	.....
Tolleston	892	202	22.6	175	19.6	12	1.3	4	.4	7	.8	4	.4	.....	.....	690	77.4	.....	.....
1	718	185	25.8	173	24.1	.....	.....	4	.6	5	.7	3	.4	.....	.....	533	74.2	.....	.....
2	128	16	12.5	2	1.6	12	9.4	.....	.....	2	1.6	.....	.....	.....	.....	112	87.5	.....	.....
3	28	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	27	.....	.....	.....
4 and over	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....	.....	.....
Not reported	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
West Gary	43	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41	.....	.....	.....
1	43	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE IX.—*Type and location of toilet, by number of families using and color and nativity of mother.*

Number of families using toilet and color and nativity of mother.	Children 2 to 7 years of age.																	
	Total children.	Type and location of toilet.																
		Water-closet.														Yard privy.		Not reported.	
		Total.		In dwelling.		Outside dwelling.													
						Hall.		Porch.		Cellar.		Yard.		Location not reported.					
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]
Total	6,015	3,964	65.9	3,141	52.2	414	6.9	123	2.0	195	3.2	89	1.5	2	(2)	2,032	33.8	19	0.3
1	4,782	3,264	68.3	3,015	63.0	53	1.1	40	.8	144	3.0	12	.3			1,518	31.7		
2	910	534	58.7	120	13.2	286	31.4	55	6.0	43	4.7	28	3.1	2	0.2	376	41.3		
3	176	91	51.7	4	2.3	45	25.6	26	14.8	6	3.4	10	5.7			85	48.3		
4 and over	111	66	59.5	2	1.8	24	21.6	2	1.8	2	1.8	36	32.4			45	40.5		
Not reported	36	9				6						3				8		19	
Native white mothers	1,843	1,437	78.0	1,299	70.5	89	4.8	5	.3	43	2.3	1	.1			399	21.6	7	.4
1	1,641	1,283	78.2	1,241	75.6	3	.2			38	2.3	1	.1			358	21.8		
2	162	129	79.6	55	34.0	66	40.7	3	1.9	5	3.1					33	20.4		
3	27	19		3		14		2								8			
4 and over	6	6				6													
Not reported	7																	7	
Foreign-born white mothers	3,934	2,395	60.9	1,752	44.5	302	7.7	113	2.9	150	3.8	76	1.9	2	.1	1,528	38.8	11	.3
1	3,003	1,893	63.0	1,689	56.2	49	1.6	39	1.3	106	3.5	10	.3			1,110	37.0		
2	686	378	55.1	60	8.7	204	29.7	48	7.0	38	5.5	26	3.8	2	.3	308	44.9		
3	138	71	51.4	1	.7	30	21.7	24	17.4	6	4.3	10	7.2			67	48.6		
4 and over	82	44		2		13		2				27				38			
Not reported	25	9				6						3				5		11	
Negro mothers	232	127	54.7	85	36.6	23	9.9	5	2.2	2	.9	12	5.2			104	44.8	1	.4
1	133	83	62.4	80	60.1	1	.8	1	.8			1	.8			50	37.6		
2	62	27		5		16		4				2				35			
3	10	1				1										9			
4 and over	23	16				5				2		9				7			
Not reported	4															3		1	
Nativity of mother not reported	6	5		5												1			
1	5	5		5															
3	1															1			

[1] Not shown where base is less than 100.

[2] Less than one-tenth of 1 per cent.

GENERAL TABLE X.—*Number of rooms in dwelling, by district of residence.*

Number of rooms in dwelling.	Children 2 to 7 years of age.													
	Total.		District of residence.											
			Ambridge.		Clark.[1]	First Subdivision.		Lincoln Park.[1]	Ridge Road and Glen Park.		South Side.		Tolleston.		West Gary.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.		Number.	Per cent distribution.		Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	162	100.0	40	1,496	100.0	99	393	100.0	2,890	100.0	892	100.0	43
1	28	.5	.....	.....	.....	8	.5	.....	.....	.....	17	.6	3	.3	.....
2	506	8.4	.....	.....	.....	33	2.2	5	42	10.7	342	11.8	82	9.2	2
3	892	14.8	1	.6	4	98	6.6	32	49	12.5	595	20.6	111	12.4	2
4	2,304	38.3	68	42.0	11	333	22.3	31	128	32.6	1,407	48.7	316	35.4	10
5	1,060	17.6	73	45.1	11	355	23.7	14	89	22.6	282	9.8	224	25.1	12
6	737	12.3	15	9.3	12	366	24.5	8	52	13.2	154	5.3	119	13.3	11
7	240	4.0	.....	.....	2	150	10.0	5	20	5.1	37	1.3	22	2.5	4
8	143	2.4	4	2.5	.....	95	6.4	3	7	1.8	23	.8	11	1.2	.....
9 and over	84	1.4	1	.6	.....	50	3.3	1	5	1.3	21	.7	4	.4	2
Not reported	21	.3	.....	.....	.....	8	.5	.....	1	.3	12	.4	.....	.....	.....

[1] Per cent distribution not shown where base is less than 100.

GENERAL TABLE XI.—*Aggregate annual earnings of family in 1917 and color and nativity of mother, by annual earnings of chief breadwinner.*

Aggregate annual earnings of family in 1917 and color and nativity of mother.	Children 2 to 7 years of age.											
	Total.		Annual earnings of chief breadwinner in 1917.						No chief breadwinner and no earnings.		Not reported	
			Under $1,050.		$1,050–$1,849.		$1,850 and over.					
	Number.	Per cent distribution.	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]
Total	6,015	100.0	1,774	100.0	2,949	100.0	819	100.0	129	100.0	344	100.0
Aggregate including earnings of chief breadwinner only	3,431	57.0	920	51.9	1,744	59.1	555	67.8	23	17.8	189	54.9
Aggregate including additional earnings	2,584	43.0	854	48.1	1,205	40.9	264	32.2	106	82.2	155	45.1
Under $1,050	447	7.4	376	21.2	.....	.....	.....	.....	71	55.0	.....	.....
$1,050 to $1,849	1,152	19.2	321	18.1	822	27.9	.....	.....	6	4.7	3	0.9
$1,850 and over	612	10.2	77	4.3	282	9.6	245	29.9	8	6.2	.....	.....
Not reported	373	6.2	80	4.5	101	3.4	19	2.3	21	16.3	152	44.2
Native white mothers	1,843	100.0	257	100.0	968	100.0	481	100.0	31	.....	106	100.0
Aggregate including earnings of chief breadwinner only	1,206	65.4	162	63.0	612	63.2	352	73.2	9	.....	71	67.0
Aggregate including additional earnings	637	34.6	95	37.0	356	36.8	129	26.8	22	.....	35	33.0
Foreign-born white mothers	3,934	100.0	1,402	100.0	1,893	100.0	330	100.0	92	.....	217	100.0
Aggregate including earnings of chief breadwinner only	2,118	53.8	703	50.1	1,092	57.7	200	60.6	14	.....	109	50.2
Aggregate including additional earnings	1,816	46.2	699	49.9	801	42.3	130	39.4	78	.....	108	49.8
Negro mothers	232	100.0	115	100.0	87	.....	4	.....	6	.....	20	.....
Aggregate including earnings of chief breadwinner only	103	44.4	55	47.8	39	.....	1	.....	.....	.....	8	.....
Aggregate including additional earnings	129	55.6	60	52.2	48	.....	3	.....	6	.....	12	.....
Nativity not reported	6	.....	.....	.....	1	.....	4	.....	.....	.....	1	.....

[1] Not shown where base is less than 100.

GENERAL TABLE XII.—*Annual earnings of chief breadwinner in 1917, by color and nativity of mother.*

Annual earnings of chief breadwinner in 1917.	Children 2 to 7 years of age.								
	Total.		Color and nativity of mother.						
			Native white.		Foreign-born white.		Negro.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	6,015	100.0	1,843	100.0	3,934	100.0	232	100.0	6
Under $850	851	14.1	122	6.6	673	17.1	56	24.1	.....
$850 to $1,049	923	15.3	135	7.3	729	18.5	59	25.4	.....
$1,050 to $1,249	1,065	17.7	239	13.0	775	19.7	51	22.0	.....
$1,250 to $1,449	843	14.0	255	13.8	570	14.5	18	7.8	.....
$1,450 to $1,849	1,041	17.3	474	25.7	548	13.9	18	7.8	1
$1,850 to $2,249	378	6.3	201	10.9	174	4.4	1	0.4	2
$2,250 and over	441	7.3	280	15.2	156	4.0	3	1.3	2
No chief breadwinner and no earnings	129	2.1	31	1.7	92	2.3	6	2.6	.....
Not reported	344	5.7	106	5.8	217	5.5	20	8.6	1

[1] Per cent distribution not shown where base is less than 100.

GENERAL TABLE XIII.—*Major cause of nonemployment of wage earners in 1917, by duration of chief breadwinner's nonemployment.*

Major cause of nonemployment of wage earner in 1917.	Children 2 to 7 years of age.											
	Total.		Chief breadwinner steadily employed.	Chief breadwinner not steadily employed.							No chief breadwinner.	Not reported.
				Duration of nonemployment.								
	Number.	Per cent distribution.[1]		Less than 1 month.	1 month, less than 2.	2 months, less than 3.	3 months, less than 4.	4 months, less than 5.	5 months, less than 6.	6 months, less than 9.	9 months and over.	
Total	6,015	100.0	2,283	1,466	675	380	256	105	68	96	59	72	555
Not reported whether wage earners	118	2.0	1	3							27	72	15
Nonwage earners	756	12.6	575	36	25	10	26	3	8	25	3		45
Wage earners	5,141	100.0	1,707	1,427	650	370	230	102	60	71	29		495
No nonemployment reported	1,802	35.1	1,707										95
Major cause of nonemployment	3,339	64.9		1,427	650	370	230	102	60	71	29		400
Shutdown	465	9.0		150	96	64	39	15	13	10			78
No job	328	6.4		212	57	21	16	1	8	1	2		10
Sickness	1,439	28.0		710	315	164	91	47	20	26	12		54
Strike or lockout	12	0.2		7	3	1			1				
Accident	118	2.3		35	34	22	12	5		8	1		1
Not reported[2]	977	19.0		313	145	98	72	34	18	26	14		257
Steel industry	3,654	100.0	1,090	1,125	484	275	151	59	46	59	17		348
No nonemployment reported	1,150	31.5	1,090										60
Major cause of nonemployment	2,504	68.5		1,125	484	275	151	59	46	59	17		288
Shutdown	430	11.8		137	89	59	37	12	13	10			73
No job	201	5.5		137	31	15	7	1	4	1			5
Sickness	1,185	32.4		585	264	135	79	28	18	24	8		44
Strike or lockout	4	0.1		2		1			1				
Accident	87	2.4		25	23	16	8	5		8	1		1
Not reported[2]	597	16.3		239	77	49	20	13	10	16	8		165
Other industry	1,478	100.0	617	301	166	95	79	42	14	12	12		140
No nonemployment reported	650	44.0	617										33
Major cause of nonemployment	828	56.0		301	166	95	79	42	14	12	12		107
Shutdown	34	2.3		13	7	5	2	2					5
No job	126	8.5		75	26	6	9		4		2		4
Sickness	254	17.2		125	51	29	12	19	2	2	4		10
Strike or lockout	8	0.5		5	3								
Accident	31	2.1		10	11	6	4						
Not reported[2]	375	25.4		73	68	49	52	21	8	10	6		88
Industry not reported	9			1				1					7
No nonemployment reported	2												2
Major cause of nonemployment	7			1				1					5
Shutdown	1							1					
No job	1												1
Not reported[2]	5			1									4

[1] Not shown where base is less than 100.
[2] Includes children whose breadwinners had died or deserted.

GENERAL TABLE XIV.—*Age of mother at beginning work away from home, by nativity of mother.*

Age of mother at beginning work away from home.	Families with children 2 to 7 years of age.								
	Total.		Nativity of mother.						
			Native white.		Foreign-born white.		Negro.		Not reported.[1]
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	3,991	100.0	1,356	100.0	2,457	100.0	172	100.0	6
Never employed away from home	1,291	32.3	376	27.7	860	35.0	54	31.4	1
Employed away from home	2,676	67.1	973	71.8	1,589	64.7	114	66.3	.....
Under 12 years	201	5.0	16	1.2	173	7.0	12	7.0	.....
12 years, under 14	272	6.8	86	6.3	168	6.8	18	10.5	.....
14 years, under 16	562	14.1	237	17.5	307	12.5	18	10.5	.....
16 years, under 20	1,099	27.5	484	35.7	590	24.0	25	14.5	.....
20 years and over	481	12.1	140	10.3	309	12.6	32	18.6	.....
Age not reported	61	1.5	10	0.7	42	1.7	9	5.2	.....
Employment not reported	24	0.6	7	0.5	8	0.3	4	2.3	5

[1] Per cent distribution not shown where base is less than 100.

GENERAL TABLE XV.—*Employment of mother in 1917, by color and nationality of mother.*

Color and nationality of mother.	Families with children 2 to 7 years of age.				
	Total.	Mother gainfully employed, 1917.		Mother not employed, 1917.	
		Number.	Per cent.[1]	Number.	Per cent.[1]
Total	3,991	1,521	38.1	2,470	61.9
Native white	1,356	425	31.3	931	68.7
Foreign-born white	2,457	1,005	40.9	1,452	59.1
Polish	567	229	40.4	338	59.6
Serbo-Croatian	350	140	40.0	210	60.0
Slovak	344	120	34.9	224	65.1
Magyar	180	61	33.9	119	66.1
Italian	154	65	42.2	89	57.8
German	150	55	36.7	95	63.3
Lithuanian	137	81	59.1	56	40.9
All other	575	254	44.2	321	55.8
Negro	172	89	51.7	83	48.3
Not reported	6	2	.....	4	.....

[1] Not shown where base is less than 100.

GENERAL TABLE XVI.—*Annual earnings of mother in 1917 and color and nativity of mother, by annual earnings of chief breadwinner.*

Annual earnings of mother in 1917, and color and nativity of mother.	Children 2 to 7 years of age.																	
	Total children.		Annual earnings of chief breadwinner in 1917.															
			Under $850.		$850 to $1,049.		$1,050 to $1,249.		$1,250 to $1,449.		$1,450 to $1,849.		$1,850 to $2,249.		$2,250 and over.		No chief breadwinner or no earnings.		Earnings not reported.	
	Number.	Per cent distribution.[1]	Number	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]	Number.	Per cent distribution.[1]
Total	6,015	100.0	851	100.0	923	100.0	1,065	100.0	843	100.0	1,041	100.0	378	100.0	441	100.0	129	100.0	344	100.0
Not employed	3,757	62.5	507	59.6	543	58.8	633	59.4	551	65.4	701	67.3	263	69.6	318	72.1	27	20.9	214	62.2
Employed	2,258	37.5	344	40.4	380	41.2	432	40.6	292	34.6	340	32.7	115	30.4	123	27.9	102	79.1	130	37.8
Earnings:																				
Under $50	317	5.3	66	7.8	50	5.4	66	6.2	43	5.1	49	4.7	10	2.6	13	2.9	9	7.0	11	3.2
$50 to $99	302	5.0	35	4.1	77	8.3	63	5.9	36	4.3	46	4.4	14	3.7	11	2.5	10	7.8	10	2.9
$100 to $149	234	3.9	38	4.5	27	2.9	40	3.8	36	4.3	54	5.2	21	5.6	11	2.5	4	3.1	3	0.9
$150 to $199	181	3.0	36	4.2	35	3.8	31	2.9	12	1.4	32	3.1	13	3.4	13	2.9	3	2.3	6	1.7
$200 and over	859	14.3	127	14.9	145	15.7	182	17.1	122	14.5	120	11.5	44	11.6	32	7.3	58	45.0	29	8.4
Not reported	365	6.1	42	4.9	46	5.0	50	4.7	43	5.1	39	3.7	13	3.4	43	9.8	18	14.0	71	20.6
Native white mothers	1,843	100.0	122	100.0	135	100.0	239	100.0	255	100.0	474	100.0	201	100.0	280	100.0	31	.....	106	100.0
Not employed	1,284	69.7	92	75.4	92	68.1	149	62.3	177	69.4	320	67.5	144	71.6	221	78.9	10	.....	79	74.5
Employed	559	30.3	30	24.6	43	31.9	90	37.7	78	30.6	154	32.5	57	28.4	59	21.1	21	.....	27	25.5
Earnings:																				
Under $50	86	4.7	6	4.9	11	8.1	18	7.5	6	2.4	27	5.7	6	3.0	9	3.2	1	.....	2	1.9
$50 to $99	75	4.1	2	1.6	7	5.2	14	5.9	13	5.1	19	4.0	8	4.0	8	2.9	1	.....	3	2.8
$100 to $149	74	4.0	3	2.5	5	3.7	9	3.8	12	4.7	32	6.8	7	3.5	6	2.1	.....	.....	.....	.....
$150 to $199	43	2.3	1	0.8	3	2.2	8	3.3	2	0.8	14	3.0	5	2.5	8	2.9	2	.....	.....	.....
$200 and over	212	11.5	13	10.7	15	11.1	30	12.6	37	14.5	53	11.2	24	11.9	17	6.1	15	.....	8	7.5
Not reported	69	3.7	5	4.1	2	1.5	11	4.6	8	3.1	9	1.9	7	3.5	11	3.9	2	.....	14	13.2
Foreign-born white mothers	3,934	100.0	673	100.0	729	100.0	775	100.0	570	100.0	548	100.0	174	100.0	156	100.0	92	.....	217	100.0
Not employed	2,358	59.9	377	56.0	426	58.4	462	59.6	368	64.6	369	67.3	118	67.8	95	60.9	17	.....	126	58.1
Employed	1,576	40.1	296	44.0	303	41.6	313	40.4	202	35.4	179	32.7	56	32.2	61	39.1	75	.....	91	41.9

Earnings:																				
Under $50	207	5.3	59	8.8	30	4.1	39	5.0	34	6.0	22	4.0	4	2.3	4	2.6	8	.....	7	3.2
$50 to $99	211	5.4	32	4.8	59	8.1	47	6.1	22	3.9	27	4.9	6	3.4	3	1.9	9	.....	6	2.8
$100 to $149	146	3.7	30	4.5	19	2.6	29	3.7	23	4.0	21	3.8	13	7.5	4	2.6	4	.....	3	1.4
$150 to $199	124	3.2	35	5.2	30	4.1	16	2.1	9	1.6	14	2.6	8	4.6	5	3.2	1	.....	6	2.8
$200 and over	616	15.7	107	15.9	123	16.9	147	19.0	80	14.0	65	11.9	19	10.9	13	8.3	41	.....	21	9.7
Not reported	272	6.9	33	4.9	42	5.8	35	4.5	34	6.0	30	5.5	6	3.4	32	20.5	12	.....	48	22.1
Negro mothers	232	100.0	56	.....	59	.....	51	.....	18	.....	18	.....	1	.....	3	.....	6	.....	20	.....
Not employed	111	47.8	38	.....	25	.....	22	.....	6	.....	11	.....	.....	.....	1	.....	.....	.....	8	.....
Employed	121	52.2	18	.....	34	.....	29	.....	12	.....	7	.....	1	.....	2	.....	6	.....	12	.....
Earnings:																				
Under $50	24	10.3	1	.....	9	.....	9	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
$50 to $99	16	6.9	1	.....	11	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
$100 to $149	12	5.2	5	.....	3	.....	2	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
$150 to $199	14	6.0	.....	.....	2	.....	7	.....	1	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
$200 and over	31	13.4	7	.....	7	.....	5	.....	5	.....	2	.....	1	.....	2	.....	2	.....	.....	.....
Not reported	24	10.3	4	.....	2	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	4	.....	9	.....
Nativity of mother not reported	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	2	.....	.....	.....	1	.....
Not employed	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	1	.....
Employed	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
Earnings:																				
$100 to $149	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE XVII.—*Separation of child from mother on account of mother's employment, by caretaker of child during major separation.*

Caretaker of child during major separation.	Children 2 to 7 years of age.														
	Total.[1]	Not separated from mother.		Separated from mother on account of her employment.											
				Less than 1 year.		1 year, less than 2.		2 years, less than 3.		3 years, less than 4.		4 years and over.		Period not reported.	
		Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]	Number.	Per cent.[2]
Total	[3] 6,015	5,543	92.2	219	3.6	91	1.5	67	1.1	32	0.5	44	0.7	18	0.3
No separation	5,543	5,543	100.0												
Cared for during separation	471			219	46.5	91	19.3	67	14.2	32	6.8	44	9.3	18	3.8
At home	260			115	44.2	56	21.5	41	15.8	14	5.4	27	10.4	7	2.7
By child	92			40		21		11		6		10		4	
By adult	162			69	42.6	35	21.6	30	18.5	8	4.9	17	10.5	3	1.9
Caretaker not reported	6			6											
Away from home	198			99	50.0	35	17.7	25	12.6	18	9.1	14	7.1	7	3.5
By adult	138			77	55.8	20	14.5	14	10.1	15	10.9	9	6.5	3	2.2
By institution	60			22		15		11		3		5		4	
Not reported whether at home or away	13			5				1				3		4	

[1] Includes those separated only during the mother's working hours and those away from their mothers both day and night.
[2] Not shown where base is less than 100.
[3] Includes 1 child for whom separation from mother was not reported.

GENERAL TABLE XVIII.—*Separation of child from mother on account of mother's employment, by annual earnings of chief breadwinner in 1917.*

Annual earnings of chief breadwinner in 1917.	Children 2 to 7 years of age.				
	Total.	Not separated from mother.		Separated from mother on account of her employment.	
		Number.	Per cent.	Number.	Per cent.
Total	[1] 6,015	5,543	92.2	471	7.8
Under $1,050	1,774	1,585	89.3	189	10.7
$1,050 to $1,849	2,949	2,773	94.0	176	6.0
$1,850 and over	819	802	97.9	17	2.1
No chief breadwinner and no earnings	129	79	61.2	50	38.8
Not reported	[1] 344	304	88.4	39	11.3

[1] Includes 1 child for whom separation from mother was not reported.

GENERAL TABLE XIX.—*Type of household help in 1917, by annual earnings of chief breadwinner and color and nativity of mother.*

Annual earnings of chief breadwinner in 1917 and color and nativity of mother.	Children 2 to 7 years of age.																	
	Total.	Usual household help in 1917.													No household duties.		Not reported as to household help.	
		No household help.		Adult hired full time.		Adult hired part time.		Adult not hired.		Laundry work only.		Child or children only.		Kind not reported.					
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]
Total	6,015	3,583	59.6	196	3.3	190	3.2	682	11.3	804	13.4	506	8.4	12	0.2	33	0.5	9	0.1
Under $1,050	1,774	1,236	69.7	12	.7	7	.4	191	10.8	130	7.3	191	10.8	1	.1	5	.3	1	.1
$1,050 to $1,849	2,949	1,827	62.0	47	1.6	81	2.7	346	11.7	387	13.1	240	8.1	8	.3	8	.3	5	.2
$1,850 and over	819	292	35.7	108	13.2	86	10.5	72	8.8	220	26.9	30	3.7	1	.1	10	1.2	.....	.....
No chief breadwinner and no earnings	129	62	48.1	2	1.6	.....	.....	26	20.2	12	9.3	17	13.2	.....	.....	9	7.0	1	.8
Not reported	344	166	48.3	27	7.8	16	4.7	47	13.7	55	16.0	28	8.1	2	.6	1	.3	2	.6
Native white mothers	1,843	843	45.7	124	6.7	120	6.5	228	12.4	416	22.6	77	4.2	6	.3	24	1.3	5	.3
Under $1,050	257	168	65.4	6	2.3	3	1.2	31	12.1	28	10.9	18	7.0	.....	.....	2	.8	1	.4
$1,050 to $1,849	968	484	50.0	23	2.4	50	5.2	140	14.5	218	22.5	39	4.0	6	.6	6	.6	2	.2
$1,850 and over	481	140	29.1	75	15.6	59	12.3	43	8.9	143	29.7	12	2.5	.....	.....	9	1.9	.....	.....
No chief breadwinner and no earnings	31	10	.....	2	.....	.....	.....	7	.....	2	.....	3	.....	.....	.....	7	.....	.....	.....
Not reported	106	41	38.7	18	17.0	8	7.5	7	6.6	25	23.6	5	4.7	.....	.....	.....	.....	2	1.9
Foreign-born mothers	3,934	2,603	66.2	71	1.8	62	1.6	408	10.4	368	9.4	405	10.3	5	.1	8	.2	4	.1
Under $1,050	1,402	980	69.9	5	.4	4	.3	152	10.8	100	7.1	157	11.2	1	.1	3	.2	.....	.....
$1,050 to $1,849	1,893	1,305	68.9	24	1.3	25	1.3	178	9.4	160	8.5	194	10.2	2	.1	2	.1	3	.2
$1,850 and over	330	150	45.5	33	10.0	25	7.6	29	8.8	74	22.4	18	5.5	.....	.....	1	.3	.....	.....
No chief breadwinner and no earnings	92	50	.....	.....	.....	.....	.....	19	.....	7	.....	13	.....	.....	.....	2	.....	1	.....
Not reported	217	118	54.4	9	4.1	8	3.7	30	13.8	27	12.4	23	10.6	2	.9	.....	.....	.....	.....
Negro mothers	232	136	58.6	1	.4	6	2.6	45	19.4	18	7.8	24	10.3	1	.4	1	.4	.....	.....
Under $1,050	115	88	76.5	1	.9	.....	.....	8	7.0	2	1.7	16	13.9	.....	.....	.....	.....	.....	.....
$1,050 to $1,849	87	38	.....	.....	.....	6	.....	27	.....	9	.....	7	.....	.....	.....	.....	.....	.....	.....
$1,850 and over	4	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....
No chief breadwinner and no earnings	6	2	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....	.....
Not reported	20	7	.....	.....	.....	.....	.....	10	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....
Not reported	6	1	.....	.....	.....	2	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
$1,050 to $1,849	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
$1,850 and over	4	1	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Not reported	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE XX.—*Number of baths per week in winter and in summer, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.																			
	Total.	Number of baths per week in winter.									Number of baths per week in summer.									
		Less than 1.		1.		2, less than 7.		7 and over.		Not reported.	Less than 1.		1.		2, less than 7.		7 and over.		Not reported.	
		Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	361	6.0	3,690	61.3	1,800	29.9	149	2.5	15	0.2	21	0.3	1,069	17.8	2,698	44.9	2,211	36.8	16	0.3
Native white	1,843	57	3.1	932	50.6	782	42.4	69	3.7	3	.2	.....	.....	152	8.2	781	42.4	904	49.1	6	.3
Foreign-born white	3,934	297	7.5	2,671	67.9	889	22.6	66	1.7	11	.3	21	.5	908	23.1	1,790	45.5	1,205	30.6	10	.3
Polish	923	38	4.1	728	78.9	145	15.7	10	1.1	2	.2	3	.3	247	26.8	373	40.4	297	32.2	3	.3
Serbo-Croatian	587	52	8.9	343	58.4	175	29.8	17	2.9	.....	.....	4	.7	141	24.0	274	46.7	167	28.4	1	.2
Slovak	546	34	6.2	425	77.8	81	14.8	5	.9	1	.2	2	.4	120	22.0	258	47.3	163	29.9	3	.5
Magyar	291	9	3.1	208	71.5	71	24.4	3	1.0	.....	.....	.....	.....	75	25.8	132	45.4	84	28.9	.....	.....
Italian	265	90	34.0	129	48.7	42	15.8	2	.8	2	.8	5	1.9	74	27.9	112	53.6	44	16.6	.....	.....
German	228	21	9.2	149	65.4	54	23.7	3	1.3	1	.4	.....	.....	61	26.8	108	47.4	59	25.9	.....	.....
Lithuanian	225	10	4.4	160	71.1	53	23.6	.....	.....	2	.9	3	1.3	67	29.8	123	54.7	32	14.2	.....	.....
All other	859	43	4.9	529	60.9	268	30.8	26	3.0	3	.3	4	.5	123	14.2	380	43.7	359	41.3	3	.3
Negro	232	7	3.0	84	36.2	126	54.3	14	6.0	1	.4	.....	.....	7	3.0	126	54.3	99	42.7	.....	.....
Not reported	6	.....	.....	3	.....	3	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....	3	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE XXI.—*Number of hours rest at night and prevalence of daytime nap, by age of child and color and nativity of mother.*

Age of child and color and nativity of mother.	Children 2 to 7 years of age.											
	Total.	Having no usual daytime nap.										
		Total.		Number hours rest at night.								
		Number.	Per cent.[1]	Less than 8.	8, less than 9.	9, less than 10.	10, less than 11.	11, less than 12.	12, less than 13.	13, less than 14.	14 and over.	Not reported.
Total	6,015	4,767	79.3	12	61	442	1,319	1,696	903	217	48	69
2 years but under 3	1,079	524	48.6	1	8	40	122	177	115	47	6	8
3 years but under 4	1,437	1,043	72.6	3	13	90	247	348	237	71	15	19
4 years but under 5	1,233	1,031	83.6	4	9	77	265	390	206	49	16	15
5 years but under 6	1,100	1,032	93.8	2	13	86	294	401	194	22	8	12
6 years but under 7	1,008	984	97.6	2	14	133	334	332	133	22	3	11
7 years but under 8	156	151	96.8	.....	4	16	55	48	18	6	.....	4
Age not reported	2	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Native white mothers	1,843	1,234	67.0	1	13	101	316	470	254	55	18	6
2 years but under 3	339	85	25.1	.....	3	4	15	24	22	14	3	.....
3 years but under 4	392	211	53.8	.....	.....	17	46	69	60	16	3	.....
4 years but under 5	399	285	71.4	.....	2	17	61	121	66	12	6	.....
5 years but under 6	338	289	85.5	1	3	21	72	122	60	4	3	3
6 years but under 7	329	319	97.0	.....	4	39	105	118	42	7	3	1
7 years but under 8	46	45	.....	.....	1	3	17	16	4	2	.....	2
Foreign-born mothers	3,934	3,371	85.7	8	46	317	962	1,180	620	150	28	60
2 years but under 3	693	424	61.2	1	5	36	102	149	91	30	2	8
3 years but under 4	992	799	80.5	2	12	70	193	271	170	52	12	17
4 years but under 5	796	718	90.2	3	7	56	199	259	134	35	10	15
5 years but under 6	715	702	98.2	1	9	58	214	264	128	16	4	8
6 years but under 7	633	624	98.6	1	10	85	215	206	83	14	.....	10
7 years but under 8	103	102	99.0	.....	3	12	37	31	14	3	.....	2
Age not reported	2	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Negro mothers	232	159	68.5	3	2	24	41	45	28	11	2	3
2 years but under 3	46	15	.....	.....	.....	.....	5	4	2	3	1	.....
3 years but under 4	52	32	.....	1	1	3	8	8	7	2	.....	2
4 years but under 5	36	28	.....	1	.....	4	5	10	6	2	.....	.....
5 years but under 6	46	40	.....	.....	1	7	8	15	5	2	1	1
6 years but under 7	45	40	.....	1	.....	9	14	7	8	1	.....	.....
7 years but under 8	7	4	.....	.....	.....	1	1	1	.....	1	.....	.....
Nativity of mother not reported	6	3	.....	.....	.....	.....	.....	1	1	1	.....	.....
2 years but under 3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3 years but under 4	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
4 years but under 5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5 years but under 6	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
6 years but under 7	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE XXI.—*Number of hours rest at night and prevalence of daytime nap, by age of child and color and nativity of mother*—Concluded.

Age of child and color and nativity of mother.	Children 2 to 7 years of age.														
	Having usual daytime nap.											Not reported as to daytime nap.			
	Total.		Number hours rest at night.									Total.		Number hours rest at night.		
	Number.	Per cent.	Less than 8.	8, less than 9.	9, less than 10.	10, less than 11.	11, less than 12.	12, less than 13.	13, less than 14.	14 and over.	Not reported.	Number.	Per cent.[1]	11, less than 12.	12, less than 13.	Not reported.
Total	1,221	20.3	4	32	147	350	422	198	47	12	9	27	0.4	1	2	24
2 years but under 3	552	51.2	2	18	63	157	180	97	26	6	3	3	.3	....	2	1
3 years but under 4	391	27.2	1	7	55	105	143	60	12	4	4	3	.2	....	....	3
4 years but under 5	193	15.7	1	6	17	61	67	31	7	1	2	9	.7	1	....	8
5 years but under 6	61	5.5	....	....	6	22	23	9	1	....	....	7	.6	....	....	7
6 years but under 7	20	2.0	....	1	5	3	8	1	1	1	....	4	.4	....	....	4
7 years but under 8	4	2.6	....	....	1	2	1	....	....	....	....	1	.6	....	....	1
Age not reported	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Native white mothers	594	32.2	1	15	57	169	210	112	23	5	2	15	.8	1	1	13
2 years but under 3	253	74.6	....	8	27	69	79	54	11	3	2	1	.3	....	1	....
3 years but under 4	178	45.4	....	4	19	49	68	31	6	1	....	3	.8	....	....	3
4 years but under 5	108	27.1	1	2	7	32	38	21	6	1	....	6	1.5	1	....	5
5 years but under 6	45	13.3	....	....	2	19	18	6	....	....	....	4	1.2	....	....	4
6 years but under 7	9	2.7	....	1	2	....	6	....	....	....	....	1	.3	....	....	1
7 years but under 8	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Foreign-born mothers	556	14.1	3	17	86	161	186	76	18	4	5	7	.2	....	1	6
2 years but under 3	268	38.7	2	10	35	78	93	37	12	1	....	1	.1	....	1	....
3 years but under 4	193	19.5	1	3	36	51	65	26	4	3	4	....	....	....	....	....
4 years but under 5	75	9.4	....	4	10	25	24	10	1	....	1	3	.4	....	....	3
5 years but under 6	12	1.7	....	....	3	3	3	2	1	....	....	1	.1	....	....	1
6 years but under 7	7	1.1	....	....	2	3	1	1	....	....	....	2	.3	....	....	2
7 years but under 8	1	1.0	....	....	....	1	....	....	....	....	....	....	....	....	....	....
Age not reported	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Negro mothers	68	29.3	....	....	4	18	25	10	6	3	2	5	2.2	....	....	5
2 years but under 3	30	....	....	....	1	9	8	6	3	2	1	1	....	....	....	1
3 years but under 4	20	....	....	....	....	5	10	3	2	....	....	....	....	....	....	....
4 years but under 5	8	....	....	....	....	3	4	....	....	....	1	....	....	....	....	....
5 years but under 6	4	....	....	....	1	....	2	1	....	....	....	2	....	....	....	2
6 years but under 7	4	....	....	....	1	....	1	....	1	1	....	1	....	....	....	1
7 years but under 8	2	....	....	....	1	1	....	....	....	....	....	1	....	....	....	1
Nativity of mother not reported	3	....	....	....	....	2	1	....	....	....	....	....	....	....	....	....
2 years but under 3	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
3 years but under 4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
4 years but under 5	2	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....
5 years but under 6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
6 years but under 7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

[1] Not shown where base is less than 100.

GENERAL TABLE XXII.—*Hour and regularity of retiring, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.																	
	Total.	Hour and regularity of retiring.																
		No regular hour.		Regular hour.													Regularity not reported.	
				Total.		Before 7.		Between 7 and 8.		Between 8 and 9.		Between 9 and 10.		10 and later.		Not reported.		
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	2,162	35.9	3,704	61.6	61	1.0	517	8.6	1,521	25.3	1,319	21.9	283	4.7	3	(2)	149	2.5
Native white	1,843	305	16.5	1,469	79.7	26	1.4	268	14.5	646	35.1	429	23.3	98	5.3	2	0.1	69	3.7
Foreign-born white	3,934	1,773	45.1	2,087	53.1	33	.8	221	5.6	814	20.7	846	21.5	172	4.4	1	.....	74	1.9
Polish	923	493	53.4	424	45.9	6	.7	27	2.9	162	17.6	180	19.5	49	5.3	.....	.....	6	.7
Serbo-Croatian	587	271	46.2	300	51.1	6	1.0	31	5.3	113	19.3	134	22.8	16	2.7	.....	.....	16	2.7
Slovak	546	282	51.6	262	48.0	2	.4	17	3.1	104	19.0	119	21.8	20	3.7	.....	.....	2	.4
Magyar	291	114	39.2	174	59.8	4	1.4	17	5.8	60	20.6	79	27.1	14	4.8	.....	.....	3	1.0
Italian	265	139	52.5	117	44.2	2	.8	16	6.0	48	18.1	34	12.8	17	6.4	.....	.....	9	3.4
German	228	55	24.1	161	70.6	1	.4	25	11.0	60	26.3	65	28.5	10	4.4	.....	.....	12	5.3
Lithuanian	225	95	42.2	125	55.6	.....	.....	12	5.3	42	18.7	53	23.6	18	8.0	.....	.....	5	2.2
All other	869	324	37.3	524	60.3	12	1.4	76	8.7	225	25.9	182	20.9	28	3.2	1	.1	21	2.4
Negro	232	80	34.5	146	62.9	2	.9	28	12.1	61	26.3	42	18.1	13	5.6	.....	.....	6	2.6
Not reported	6	4	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

[2] Less than one-tenth of 1 per cent.

GENERAL TABLE XXIII.—*Hour and regularity of retiring, by annual earnings of chief breadwinner in 1917.*

Annual earnings of chief breadwinner in 1917.	Children 2 to 7 years of age.																	
	Total.	Hour and regularity of retiring.																
		No regular hour.		Regular hour.													Regularity not reported.	
				Total.		Before 7.		Between 7 and 8.		Between 8 and 9.		Between 9 and 10.		10 and later.		Not reported.		
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	2,162	35.9	3,704	61.6	61	1.0	517	8.6	1,521	25.3	1,319	21.9	283	4.7	3	(1)	149	2.5
Under $850	851	405	47.6	434	51.0	13	1.5	50	5.9	169	19.9	166	19.5	36	4.2	.....	.....	12	1.4
$850 to $1,049	923	403	43.7	504	54.6	5	.5	69	7.5	209	22.6	186	20.2	35	3.8	.....	.....	16	1.7
$1,050 to $1,249	1,065	427	40.1	622	58.4	9	.8	72	6.8	258	24.2	239	22.4	44	4.1	.....	.....	16	1.5
$1,250 to $1,449	843	289	34.3	527	62.5	3	.4	66	7.8	233	27.6	166	19.7	59	7.0	.....	.....	27	3.2
$1,450 to $1,849	1,041	301	28.9	714	68.6	8	.8	96	9.2	282	27.1	273	26.2	53	5.1	2	0.2	26	2.5
$1,850 to $2,249	378	59	15.6	306	81.0	6	1.6	52	13.8	125	33.1	103	27.2	20	5.3	.....	.....	13	3.4
$2,250 and over	441	91	20.6	333	75.5	9	2.0	73	16.6	139	31.5	97	22.0	14	3.2	1	.2	17	3.9
No chief breadwinner and no earnings	129	58	45.0	69	53.5	2	1.6	8	6.2	31	24.0	26	20.2	2	1.6	.....	.....	2	1.6
Earnings not reported	344	129	37.5	195	56.7	6	1.7	31	9.0	75	21.8	63	18.3	20	5.8	.....	.....	20	5.8

[1] Less than one-tenth of 1 per cent.

GENERAL TABLE XXIV.—*Hour and regularity of rising, by age of child.*

Age of child.	Children 2 to 7 years of age.															
	Total.	Hour and regularity of rising.														
		No regular hour.		Regular hour.										Regularity not reported.		
				Total.		Before 6.		Between 6 and 7.		Between 7 and 8.		8 and later.		Not reported.		
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	2,309	38.4	3,546	59.0	49	0.8	582	9.7	1,680	27.9	1,232	20.5	3	[2].	160	2.7
2 years, under 3	1,079	438	40.6	601	55.7	12	1.1	122	11.3	269	24.9	198	18.4	.....	.....	40	3.7
3 years, under 4	1,437	597	41.5	808	56.2	13	.9	135	9.4	355	24.7	305	21.2	.....	.....	32	2.2
4 years, under 5	1,233	499	40.5	700	56.8	10	.8	94	7.6	326	26.4	267	21.7	3	0.2	34	2.8
5 years, under 6	1,100	391	35.5	680	61.8	7	.6	97	8.8	315	28.6	261	23.7	.....	.....	29	2.6
6 years, under 7	1,008	347	34.4	639	63.4	5	.5	112	11.1	349	34.6	173	17.2	.....	.....	22	2.2
7 years, under 8	156	35	22.4	118	75.6	2	1.3	22	14.1	66	42.3	28	17.9	.....	.....	3	1.9
Not reported	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

[2] Less than one-tenth of 1 per cent.

GENERAL TABLE XXV.—*Hour and regularity of rising, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.															
	Total.	Hour and regularity of rising.														
		No regular hour.		Regular hour.											Regularity not reported.	
				Total.		Before 6.		Between 6 and 7.		Between 7 and 8.		8 and later.		Not reported.		
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.
Total	6,015	2,309	38.4	3,546	59.0	49	0.8	582	9.7	1,680	27.9	1,232	20.5	3	(2)	160	2.7
Native white	1,843	362	19.6	1,394	75.6	14	.8	219	11.9	709	38.5	450	24.4	2	0.1	87	4.7
Foreign-born white	3,934	1,833	46.6	2,033	51.7	32	.8	337	8.6	920	23.4	743	18.9	1	(2)	68	1.7
Polish	923	503	54.5	412	44.6	3	.3	80	8.7	179	19.4	150	16.3	.....	.....	8	.9
Serbo-Croatian	587	269	45.8	301	51.3	8	1.4	40	6.8	142	24.2	111	18.9	.....	.....	17	2.9
Slovak	546	287	52.6	252	46.2	1	.2	39	7.1	112	20.5	100	18.3	.....	.....	7	1.3
Magyar	291	142	48.8	146	50.2	8	2.7	23	7.9	69	23.7	46	15.8	.....	.....	3	1.0
Italian	265	131	49.4	129	48.7	.....	.....	41	15.5	57	21.5	31	11.7	.....	.....	5	1.9
German	228	52	22.8	171	75.0	1	.4	18	7.9	80	35.1	72	31.6	.....	.....	5	2.2
Lithuanian	225	107	47.6	113	50.2	.....	.....	14	6.2	45	20.0	54	24.0	.....	.....	5	2.2
All other	869	342	39.4	509	58.6	11	1.3	82	9.4	236	27.2	179	20.6	1	.1	18	2.1
Negro	232	112	48.3	115	49.6	3	1.3	26	11.2	49	21.1	37	15.9	.....	.....	5	2.2
Not reported	6	2	.....	4	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

Less than one-tenth of 1 per cent.

GENERAL TABLE XXVI.—*The wearing of night clothing, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.				
	Total.	Wearing no night clothing.	Wearing as night clothing.		Not reported.
			Clothing worn during day.	No clothing worn during day.	
Total	6,015	14	2,058	3,926	17
Native white	1,843	.....	376	1,460	7
Foreign-born white	3,934	13	1,651	2,264	6
Polish	923	2	393	527	1
Serbo-Croatian	587	.....	239	347	1
Slovak	546	.....	238	308	.....
Magyar	291	2	116	173	.....
Italian	265	5	171	87	2
German	228	.....	70	157	1
Lithuanian	225	.....	142	82	1
All other	869	4	282	583	.....
Negro	232	1	31	196	4
Not reported	6	.....	.....	6	.....

GENERAL TABLE XXVII.—*Number of hours rest at night, by number of additional occupants of child's bedroom.*

Number of additional occupants of child's bedroom.	Children 2 to 7 years of age.																	
	Total.	Number of hours rest at night.																
		Less than 8.		8, less than 9.		9, less than 10.		10, less than 11.		11, less than 12.		12, less than 13.		13, less than 14.		14 and over.		Not reported.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.[1]
Total	6,015	16	0.3	93	1.5	589	9.8	1,669	27.7	2,119	35.5	1,103	18.3	264	4.4	60	1.0	102	1.7
None	261	1	.4	2	.8	17	6.5	73	28.0	80	30.7	63	24.1	18	6.9	2	.8	5	1.9
1	1,415	3	.2	14	1.0	125	8.8	389	27.5	551	38.9	245	17.3	64	4.5	12	.8	12	.8
2	1,800	6	.3	35	1.9	184	10.2	504	28.0	624	34.7	318	17.7	85	4.7	22	1.2	22	1.2
3	1,232	4	.3	28	2.3	115	9.3	355	28.8	408	33.1	249	20.2	43	3.5	12	1.0	18	1.5
4	808	.....	.....	8	1.0	85	10.5	247	30.6	278	34.4	143	17.7	30	3.7	4	.5	13	1.6
5 and over	469	2	.4	6	1.3	63	13.4	100	21.3	175	37.3	82	17.5	24	5.1	8	1.7	9	1.9
Not reported	30	.....	.....	.....	.....	.....	.....	1	.....	3	.....	3	.....	.....	.....	.....	.....	23	.....

[1] Not shown where base is less than 100.

GENERAL TABLE XXVIII.—*Additional occupants of child's bed, by color and nationality of mother.*

Color and nationality of mother.	Children 2 to 7 years of age.													
	Total.	No additional occupants.		Type of additional occupants of child's bed.										
				Members of family.								Not members of family.			
				Children only.		Adults only.		Adults and children.		Not reported.		Adults only.		Not reported.	
		Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.[1]	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	6,015	1,360	22.6	2,636	43.8	1,224	20.3	753	12.5	5	0.1	11	0.2	26	0.4
Native white	1,843	697	37.8	676	36.7	356	19.3	97	5.3	.....	.....	3	.2	14	.8
Foreign-born white	3,934	613	15.6	1,845	46.9	824	20.9	633	16.1	4	.1	8	.2	7	.2
Polish	923	97	10.5	427	46.3	196	21.2	198	21.5	2	.2	2	.2	1	.1
Serbo-Croatian	587	96	16.4	291	49.6	115	19.6	81	13.8	2	.3	1	.2	1	.2
Slovak	516	56	10.3	247	45.2	117	21.4	126	23.1	.....	.....	.....	.....	.....	.....
Magyar	291	35	12.0	148	50.9	78	26.8	30	10.3	.....	.....	.....	.....	.....	.....
Italian	265	40	15.1	165	62.3	36	13.6	22	8.3	.....	.....	1	.4	1	.4
German	228	52	22.8	104	45.6	54	23.7	17	7.5	.....	.....	.....	.....	1	.4
Lithuanian	225	26	11.6	104	46.2	52	23.1	41	18.2	.....	.....	1	.4	1	.4
All other	869	211	24.3	359	41.3	176	20.3	118	13.6	.....	.....	3	.3	2	.2
Negro	232	45	19.1	115	49.6	43	18.5	23	9.9	1	.4	.....	.....	5	2.2
Not reported	6	5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Not shown where base is less than 100.

GENERAL TABLE XXIX.—*Number and purpose of visits to dentist, by age of child and color and nativity of mother.*

Age of child and color and nativity of mother.	Children 2 to 7 years of age.													
	Total.	Who had paid no visits to dentist.	Who had paid specified number of visits to dentist.											Not reported as to visits.
			For extraction only.						For other reasons, with or without extraction.					
			Total.	1 visit.	2 visits.	3 visits.	4 and over.	Number not reported.	Total.	1 visit.	2 visits.	3 visits.	4 and over.	Number not reported.
Total	6,015	5,290	246	193	34	12	1	6	475	244	88	47	60	36	4
2 years, under 3	1,079	1,061	1	1					15	9	1	1	2	2	2
3 years, under 4	1,437	1,355	24	22	1	1			57	36	14	3	3	1	1
4 years, under 5	1,233	1,085	38	33	3	2			110	68	16	9	13	4	
5 years, under 6	1,100	899	76	58	9	4	1	4	125	61	24	13	14	13	
6 years, under 7	1,008	762	98	71	21	5		1	147	62	31	17	23	14	1
7 years, under 8	156	126	9	8				1	21	8	2	4	5	2	
Not reported	2	2													
Native white mothers	1,843	1,491	73	48	14	5		6	277	128	57	29	37	26	2
2 years, under 3	339	330	1	1					6	4	1		1		2
3 years, under 4	392	356	1		1				35	23	8	2	1	1	
4 years, under 5	399	329	10	6	3	1			60	36	10	5	7	2	
5 years, under 6	338	244	21	12	4	1		4	73	31	10	10	12	10	
6 years, under 7	329	202	35	25	6	3		1	92	32	26	10	13	11	
7 years, under 8	46	30	5	4				1	11	2	2	2	3	2	
Foreign-born white mothers	3,934	3,574	167	139	20	7	1		191	112	30	17	22	10	2
2 years, under 3	693	684							9	5		1	1	2	
3 years, under 4	992	948	22	21		1			21	12	6	1	2		1
4 years, under 5	796	722	28	27		1			46	30	5	4	5	2	
5 years, under 6	715	609	54	45	5	3	1		52	30	14	3	2	3	
6 years, under 7	633	519	59	42	15	2			54	29	5	7	10	3	1
7 years, under 8	103	90	4	4					9	6		1	2		
Not reported	2	2													
Negro mothers	232	221	6	6					5	3	1	1			
2 years, under 3	46	46													
3 years, under 4	52	50	1	1					1	1					
4 years, under 5	36	34							2	1	1				
5 years, under 6	46	45	1	1											
6 years, under 7	45	40	4	4					1	1					
7 years, under 8	7	6							1			1			
Nativity of mother not reported	6	4							2	1			1		
2 years, under 3	1	1													
3 years, under 4	1	1													
4 years, under 5	2								2	1			1		
5 years, under 6	1	1													
6 years, under 7	1	1													

GENERAL TABLE XXX.—*Number of visits to dentist, by age of child and annual earnings of chief breadwinner in 1917.*

Age of child and annual earnings of chief breadwinner in 1917.	Children 2 to 7 years of age.						
	Total.	Who had paid no visits to dentist.		Who had paid one or more visits to dentist.		Not reported as to visits.	
		Number.	Per cent.[1]	Number.	Per cent.[1]	Number.	Per cent.
Total	6,015	5,290	87.9	721	12.0	4	0.1
2 years, under 3	1,079	1,061	98.3	16	1.5	2	.2
3 years, under 4	1,437	1,355	94.3	81	5.6	1	.1
4 years, under 5	1,233	1,085	88.0	148	12.0	.....	.....
5 years, under 6	1,100	899	81.7	201	18.3	.....	.....
6 years, under 7	1,008	762	75.6	245	24.3	1	.1
7 years, under 8	156	126	80.8	30	19.2	.....	.....
Not reported	2	2	.....	.....	.....	.....	.....
Under $1,050	1,774	1,640	92.4	132	7.4	2	.1
2 years, under 3	334	329	98.5	3	.9	2	.6
3 years, under 4	431	412	95.6	19	4.4	.....	.....
4 years, under 5	352	326	92.6	26	7.4	.....	.....
5 years, under 6	319	280	87.8	39	12.2	.....	.....
6 years, under 7	279	239	85.7	40	14.3	.....	.....
7 years, under 8	59	54	.....	5	.....	.....	.....
$1,050 to $1,849	2,949	2,605	88.3	342	11.6	2	.1
2 years, under 3	541	533	98.5	8	1.5	.....	.....
3 years, under 4	717	682	95.1	34	4.7	1	.1
4 years, under 5	609	543	89.2	66	10.8	.....	.....
5 years, under 6	529	430	81.3	99	18.7	.....	.....
6 years, under 7	488	365	74.8	122	25.0	1	.2
7 years, under 8	63	50	.....	13	.....	.....	.....
Not reported	2	2	.....	.....	.....	.....	.....
$1,850 and over	819	642	78.4	177	21.6	.....	.....
2 years, under 3	136	132	97.1	4	2.9	.....	.....
3 years, under 4	190	166	87.4	24	12.6	.....	.....
4 years, under 5	176	138	78.4	38	21.6	.....	.....
5 years, under 6	158	114	72.2	44	27.8	.....	.....
6 years, under 7	142	82	57.7	60	42.3	.....	.....
7 years, under 8	17	10	.....	7	.....	.....	.....
No chief breadwinner and no earnings	129	107	82.9	22	17.1	.....	.....
2 years, under 3	17	16	.....	1	.....	.....	.....
3 years, under 4	26	25	.....	1	.....	.....	.....
4 years, under 5	23	18	.....	5	.....	.....	.....
5 years, under 6	29	23	.....	6	.....	.....	.....
6 years, under 7	30	23	.....	7	.....	.....	.....
7 years, under 8	4	2	.....	2	.....	.....	.....
Earnings not reported	344	296	86.0	48	14.0	.....	.....
2 years, under 3	51	51	.....	.....	.....	.....	.....
3 years, under 4	73	70	.....	3	.....	.....	.....
4 years, under 5	73	60	.....	13	.....	.....	.....
5 years, under 6	65	52	.....	13	.....	.....	.....
6 years, under 7	69	53	.....	16	.....	.....	.....
7 years, under 8	13	10	.....	3	.....	.....	.....

[1] Not shown where base is less than 100.

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